

S
ENTER LOGIC EXPRESSION, QUERY NAME, OR (END):s chlorpropamide
2383804 S
999 CHLORPROPAMIDE
L3 0 S CHLORPROPAMIDE
(S(W)CHLORPROPAMIDE)

=> s chlorpropamide and vanadium
999 CHLORPROPAMIDE
40027 VANADIUM
L4 151 CHLORPROPAMIDE AND VANADIUM

=> s l4 and vanadyl sulfate
3544 VANADYL
231630 SULFATE
682 VANADYL SULFATE
(VANADYL(W)SULFATE)
L5 112 L4 AND VANADYL SULFATE

=> s l6 and pd< 1998
L6 NOT FOUND
The L-number entered could not be found. To see the definition
of L-numbers, enter DISPLAY HISTORY at an arrow prompt (=>).

=> s l5 and pd< 1998
2268293 PD< 1998
(PD<19980000)
L6 0 L5 AND PD< 1998

=> d his

(FILE 'HOME' ENTERED AT 13:47:58 ON 21 MAY 2003)

FILE 'USPATFULL' ENTERED AT 13:48:11 ON 21 MAY 2003

L1 113 S DIABETES AND VANADYL SULFATE AND CHLORPROPAMIDE
L2 0 S L1 AND PD<1998
L3 0 S S CHLORPROPAMIDE
L4 151 S CHLORPROPAMIDE AND VANADIUM
L5 112 S L4 AND VANADYL SULFATE
L6 0 S L5 AND PD< 1998

=> s l4 and pd<1998
2268293 PD<1998
(PD<19980000)
L7 3 L4 AND PD<1998

=> d l7 l=3 kwic, bib
'l=3' IS NOT VALID HERE
Your input could not be processed as entered. For more help, please
enter "HELP DISPLAY UNIT" at an arrow prompt (=>).

=> d l7 1-3 kwic, bib

L7 ANSWER 1 OF 3 USPATFULL
PI US 6297269 B1 20011002
WO 9639385 19961212 <--
SUMM . . . and its subsequent widespread use in the treatment of diabetes,
and the later discovery of and use of sulfonylureas (e.g.
Chlorpropamide.TM. (Pfizer), Tolbutamide.TM. (Upjohn),
Acetohexamide.TM. (E. I. Lilly), Tolazamide.TM. (Upjohn) and biguanides
(e.g. Phenformin.TM. (Ciba Geigy), Metformin.TM. (G. D. Searle)) as. .

SUMM . . . agents such as insulin and insulin analogs (e.g. LysPro insulin); GLP-1 (7-37) (insulinotropin) and GLP-1 (7-36)-NH.sub.2 ; Sulfonylureas and Analogs: **chlorpropamide**, glibenclamide, tolbutamide, tolazamide, acetohexamide, glypizide.RTM., glimepiride, repaglinide, meglitinide; Biguanides: metformin, phenformin, buformin; .alpha.2-Antagonists and Imidazolines: midaglizole, isaglidole, deriglidole, idazoxan, efaroxan,. . . 35135, BRL 37344, Ro 16-8714, ICI D7114, CL 316,243; Phosphodiesterase Inhibitors: L-386,398; Lipid-lowering Agents: benfluorex; Antiobesity Agents: fenfluramine; Vanadate and **vanadium** complexes (e.g. naglivan.RTM.) and peroxovanadium complexes; Amylin Antagonists; Glucagon Antagonists; Gluconeogenesis Inhibitors; Somatostatin Analogs; Antilipolytic Agents: nicotinic acid, acipimox, WAG. . .

CLM What is claimed is:
. . and Imidazolines; insulin secretagogues; Glitazones; Fatty Acid Oxidation inhibitors; .alpha.-Glucosidase inhibitors; .beta.-Agonists; Phosphodiesterase Inhibitors; Lipid-lowering Agents; Antiobesity Agents; Vanadate and **vanadium** complexes and peroxovanadium complexes; Amylin Antagonists; Glucagon Antagonists; Gluconeogenesis Inhibitors; Somatostatin Analogs; Antilipolytic Agents; and c) optionally a pharmaceutically acceptable. . .

AN 2001:168152 USPATFULL|

TI Substituted n-(indole-2-carbonyl-) amides and derivatives as glycogen phosphorylase inhibitors|

IN Hulin, Bernard, Essex, CT, United States
Hoover, Dennis J., Stonington, CT, United States
Treadway, Judith L., Gales Ferry, CT, United States
Martin, William H., Essex, CT, United States

PA Pfizer Inc., New York, NY, United States (U.S. corporation).

PI US 6297269 B1 20011002
WO 9639385 19961212 <--

AI US 1997-952668 19971202 (8)
WO 1995-IB443 19950606
19971202 PCT 371 date
19971202 PCT 102(e) date

DT Utility|

FS GRANTED|

EXNAM Primary Examiner: Ramsuer, Robert W.; Assistant Examiner: Keating, Domenik|

LREP Richardson, Peter C., Benson, Gregg C., Olson, A. Dean|

CLMN Number of Claims: 77|

ECL Exemplary Claim: 1|

DRWN No Drawings

LN.CNT 4318|

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 2 OF 3 USPATFULL

PI US 6107329 20000822
WO 9639384 19961212 <--

SUMM . . . and its subsequent widespread use in the treatment of diabetes, and the later discovery of and use of sulfonylureas (e.g. **Chlorpropamide**.TM. (Pfizer), Tolbutamide.TM. (Upjohn), Acetohexamide.TM. (E. I. Lilly), Tolazamide.TM. (Upjohn)) and biguanides (e.g. Phenformin.TM. (Ciba Geigy), Metformin.TM. (G. D. Searle)) as. .

SUMM . . . agents such as insulin and insulin analogs (e.g. LysPro insulin); GLP-1 (7-37) (insulinotropin) and GLP-1 (7-36)-NH.sub.2 ; Sulfonylureas and Analogs: **chlorpropamide**, glibenclamide, tolbutamide, tolazamide, acetohexamide, glypizide.RTM., glimepiride, repaglinide, meglitinide; Biguanides: metformin, phenformin, buformin; .alpha.2-Antagonists and Imidazolines: midaglizole, isaglidole, deriglidole, idazoxan, efaroxan,. . . 35135, BRL 37344, Ro 16-8714,

ICI D7114, CL 316,243; Phosphodiesterase Inhibitors: L-386,398;
Lipid-lowering Agents: benfluorex; Antiobesity Agents: fenfluramine;
Vanadate and **vanadium** complexes (e.g. naglivan.RTM.) and
peroxovanadium complexes; Amylin Antagonists; Glucagon Antagonists;
Gluconeogenesis Inhibitors; Somatostatin Analogs; Antilipolytic Agents:
nicotinic acid, acipimox, WAG. . .

AN 2000:109834 USPATFULL
TI Substituted n-(indole-2-carbonyl)-glycinamides and derivatives as
glycogen phosphorylase inhibitors
IN Hoover, Dennis J., Stonington, CT, United States
Hulin, Bernard, Essex, CT, United States
Martin, William H., Essex, CT, United States
Phillips, Douglas, Gales Ferry, CT, United States
Treadway, Judith L., Gales Ferry, CT, United States
PA Pfizer, Inc., New York, NY, United States (U.S. corporation)
PI US 6107329 20000822
WO 9639384 19961212 <--
AI US 1997-952669 19971202 (8)
WO 1995-IB442 19950606
19971202 PCT 371 date
19971202 PCT 102(e) date
DT Utility
FS Granted
EXNAM Primary Examiner: Riley, Jezia
LREP Richardson, Peter C., Benson, Gregg C., Olson, A. Dean
CLMN Number of Claims: 44
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 5662
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 3 OF 3 USPATFULL

PI US 4959212 19900925 <--
SUMM . . . daily dosage of either 1.25-20 mg. of glyburide--1-[(p-(5-chloro-o-anisamido) ethyl) phenyl)-sulfonyl] 3-cyclohexylurea--sold under the registered trademark Micronase.RTM. or 125-750 mg. of **chlorpropamide**--1-((p-chlorophenyl)-sulfonyl) 3-propylurea--sold under the trademark Diabinese.RTM..
DETD . . . The disodium salt exhibits limited stability in water and is not stable in the presence of some impurities, such as **vanadium**. These instability problems limit its use in the inventive compositions.
DETD . . . glucose concentration used as a daily dose; the antidiabetic drug generally will be selected from the group consisting of glyburide, **chlorpropamide**, tolbutamide and tolazamide. Generally, the daily dosages of such antidiabetic drugs will be in the following ranges: 1.25 to 20 mg. of glyburide (Micronase.RTM.; 125 to 750 mg. of **chlorpropamide** (Diabinese.RTM.); 250 to 1250 mg of tolbutamide (Orinase.RTM.); and 250 to 1250 mg. of tolazamide (Tolinase.RTM.). The described drug dosages. . .
DETD Example 3 is repeated with the exception that 750 mg./day of **chlorpropamide** in the form of Diabinese.RTM. tablets is used as the antidiabetic drug. The carbohydrate ingestion value is 115-125 mg./day for. . .
CLM What is claimed is:
. . . is selected from the group consisting of 1.25 mg. to 20 mg. of glyburide, 125 mg. to 750 mg. of **chlorpropamide**, 250 mg. to 1250 mg. of tolbutamide and 250 mg. to 1250 mg. of tolazamide, said concentrations being the total. . .
. . . is selected from the group consisting of 1.25 mg. to 20 mg. of glyburide, 125 mg. to 750 mg. of **chlorpropamide**, 250 mg. to 1250 mg. of tolbutamide and 250 mg. to 1250 mg. of tolazamide is

administered, said drug concentration. . . .

AN 90:74947 USPATFULL|

TI Oxidizing-energizing composition and method for the treatment of
diabetes|

IN Stancesco, Alexandra, 1184 Main St., Apt. 75, River Edge, NJ, United
States 07661
Spiliadis, Apostol, 5-D Patton Dr., Bloomfield, NJ, United States 07003
Dumas, Theodore, 977 Waterloo Street, Ontario, London, Canada N 6 A 2 x
4

PI US 4959212 19900925 <--

AI US 1988-209877 19880622 (7)

DT Utility|

FS Granted|

EXNAM Primary Examiner: Stone, Jacqueline; Assistant Examiner: Witz, Jean C.|

LREP Miller, Richard N.|

CLMN Number of Claims: 21|

ECL Exemplary Claim: 1|

DRWN No Drawings

LN.CNT 935|

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

Welcome to STN International! Enter x:x

LOGINID:sssptaul25txc

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

| | | | |
|------|----|--------|---|
| NEWS | 1 | | Web Page URLs for STN Seminar Schedule - N. America |
| NEWS | 2 | Apr 08 | "Ask CAS" for self-help around the clock |
| NEWS | 3 | Jun 03 | New e-mail delivery for search results now available |
| NEWS | 4 | Aug 08 | PHARMAMarketLetter(PHARMAML) - new on STN |
| NEWS | 5 | Aug 19 | Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN |
| NEWS | 6 | Aug 26 | Sequence searching in REGISTRY enhanced |
| NEWS | 7 | Sep 03 | JAPIO has been reloaded and enhanced |
| NEWS | 8 | Sep 16 | Experimental properties added to the REGISTRY file |
| NEWS | 9 | Sep 16 | CA Section Thesaurus available in CAPLUS and CA |
| NEWS | 10 | Oct 01 | CASREACT Enriched with Reactions from 1907 to 1985 |
| NEWS | 11 | Oct 24 | BEILSTEIN adds new search fields |
| NEWS | 12 | Oct 24 | Nutraceuticals International (NUTRACEUT) now available on STN |
| NEWS | 13 | Nov 18 | DKILIT has been renamed APOLLIT |
| NEWS | 14 | Nov 25 | More calculated properties added to REGISTRY |
| NEWS | 15 | Dec 04 | CSA files on STN |
| NEWS | 16 | Dec 17 | PCTFULL now covers WP/PCT Applications from 1978 to date |
| NEWS | 17 | Dec 17 | TOXCENTER enhanced with additional content |
| NEWS | 18 | Dec 17 | Adis Clinical Trials Insight now available on STN |
| NEWS | 19 | Jan 29 | Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC |
| NEWS | 20 | Feb 13 | CANCERLIT is no longer being updated |
| NEWS | 21 | Feb 24 | METADDEX enhancements |
| NEWS | 22 | Feb 24 | PCTGEN now available on STN |
| NEWS | 23 | Feb 24 | TEMA now available on STN |
| NEWS | 24 | Feb 26 | NTIS now allows simultaneous left and right truncation |
| NEWS | 25 | Feb 26 | PCTFULL now contains images |
| NEWS | 26 | Mar 04 | SDI PACKAGE for monthly delivery of multifile SDI results |
| NEWS | 27 | Mar 20 | EVENTLINE will be removed from STN |
| NEWS | 28 | Mar 24 | PATDPAFULL now available on STN |
| NEWS | 29 | Mar 24 | Additional information for trade-named substances without structures available in REGISTRY |
| NEWS | 30 | Apr 11 | Display formats in DGENE enhanced |
| NEWS | 31 | Apr 14 | MEDLINE Reload |
| NEWS | 32 | Apr 17 | Polymer searching in REGISTRY enhanced |
| NEWS | 33 | Apr 21 | Indexing from 1947 to 1956 being added to records in CA/CAPLUS |
| NEWS | 34 | Apr 21 | New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX |
| NEWS | 35 | Apr 28 | RDISCLOSURE now available on STN |
| NEWS | 36 | May 05 | Pharmacokinetic information and systematic chemical names added to PHAR |
| NEWS | 37 | May 15 | MEDLINE file segment of TOXCENTER reloaded |
| NEWS | 38 | May 15 | Supporter information for ENCOMPPAT and ENCOMPLIT updated |
| NEWS | 39 | May 16 | CHEMREACT will be removed from STN |
| NEWS | 40 | May 19 | Simultaneous left and right truncation added to WSCA |
| NEWS | 41 | May 19 | RAPRA enhanced with new search field, simultaneous left and right truncation |

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT

MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
 AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

| | |
|------------|---|
| NEWS HOURS | STN Operating Hours Plus Help Desk Availability |
| NEWS INTER | General Internet Information |
| NEWS LOGIN | Welcome Banner and News Items |
| NEWS PHONE | Direct Dial and Telecommunication Network Access to STN |
| NEWS WWW | CAS World Wide Web Site (general information) |

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 14:37:46 ON 21 MAY 2003

| | | |
|----------------------|------------------|---------------|
| => file uspatfull | | |
| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'USPATFULL' ENTERED AT 14:38:21 ON 21 MAY 2003
 CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 20 May 2003 (20030520/PD)
 FILE LAST UPDATED: 20 May 2003 (20030520/ED)
 HIGHEST GRANTED PATENT NUMBER: US6567988
 HIGHEST APPLICATION PUBLICATION NUMBER: US2003093849
 CA INDEXING IS CURRENT THROUGH 20 May 2003 (20030520/UPCA)
 ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 20 May 2003 (20030520/PD)
 REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2003
 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2003

| | |
|---|-----|
| >>> USPAT2 is now available. USPATFULL contains full text of the | <<< |
| >>> original, i.e., the earliest published granted patents or | <<< |
| >>> applications. USPAT2 contains full text of the latest US | <<< |
| >>> publications, starting in 2001, for the inventions covered in | <<< |
| >>> USPATFULL. A USPATFULL record contains not only the original | <<< |
| >>> published document but also a list of any subsequent | <<< |
| >>> publications. The publication number, patent kind code, and | <<< |
| >>> publication date for all the US publications for an invention | <<< |
| >>> are displayed in the PI (Patent Information) field of USPATFULL | <<< |
| >>> records and may be searched in standard search fields, e.g., /PN, | <<< |
| >>> /PK, etc. | <<< |

| | |
|--|-----|
| >>> USPATFULL and USPAT2 can be accessed and searched together | <<< |
| >>> through the new cluster USPATALL. Type FILE USPATALL to | <<< |
| >>> enter this cluster. | <<< |
| >>> | <<< |
| >>> Use USPATALL when searching terms such as patent assignees, | <<< |
| >>> classifications, or claims, that may potentially change from | <<< |
| >>> the earliest to the latest publication. | <<< |

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s chlorpropamide

```

L1          999 CHLORPROPAMIDE

=> s l1 and pd<1999
    2435280 PD<1999
        (PD<199900000)
L2          459 L1 AND PD<1999

=> s l1 and pd<1998
    2268293 PD<1998
        (PD<199800000)
L3          421 L1 AND PD<1998

=> s l1 and pd<1997
    2136955 PD<1997
        (PD<199700000)
L4          386 L1 AND PD<1997

=> s l1 and pd<1996
    2009370 PD<1996
        (PD<199600000)
L5          359 L1 AND PD<1996

=> s l5 and vanadyl sulfate
    3544 VANADYL
    231630 SULFATE
    682 VANADYL SULFATE
        (VANADYL(W) SULFATE)
L6          0 L5 AND VANADYL SULFATE

=> s l4 and vanadyl sulfate
    3544 VANADYL
    231630 SULFATE
    682 VANADYL SULFATE
        (VANADYL(W) SULFATE)
L7          0 L4 AND VANADYL SULFATE

=> s l3 and vanadyl sulfate
    3544 VANADYL
    231630 SULFATE
    682 VANADYL SULFATE
        (VANADYL(W) SULFATE)
L8          0 L3 AND VANADYL SULFATE

=> d his

```

(FILE 'HOME' ENTERED AT 14:37:46 ON 21 MAY 2003)

FILE 'USPATFULL' ENTERED AT 14:38:21 ON 21 MAY 2003

```

L1          999 S CHLORPROPAMIDE
L2          459 S L1 AND PD<1999
L3          421 S L1 AND PD<1998
L4          386 S L1 AND PD<1997
L5          359 S L1 AND PD<1996
L6          0 S L5 AND VANADYL SULFATE
L7          0 S L4 AND VANADYL SULFATE
L8          0 S L3 AND VANADYL SULFATE

=> s l2 and vanadyl sulfate
    3544 VANADYL
    231630 SULFATE
    682 VANADYL SULFATE
        (VANADYL(W) SULFATE)

```

L9 1 L2 AND VANADYL SULFATE

=> d 19

L9 ANSWER 1 OF 1 USPATFULL
AN 1998:153865 USPATFULL
TI Composition and method for reducing blood sugar levels in diabetic humans
IN Al-Dahir, Holly Christine, 4521 Conlin St., Metairie, LA, United States 70006
PI US 5846544 19981208 <--
AI US 1997-891590 19970711 (8)
DT Utility
FS Granted
LN.CNT 245
INCL INCLM: 424/195.100
INCLS: 514/783.000; 514/866.000; 514/884.000
NCL NCLM: 424/732.000
NCLS: 514/783.000; 514/866.000; 514/884.000
IC [6]
ICM: A61K035-78
EXF 424/195.1; 514/783; 514/866; 514/884

=> d his

(FILE 'HOME' ENTERED AT 14:37:46 ON 21 MAY 2003)

FILE 'USPATFULL' ENTERED AT 14:38:21 ON 21 MAY 2003

L1 999 S CHLORPROPAMIDE
L2 459 S L1 AND PD<1999
L3 421 S L1 AND PD<1998
L4 386 S L1 AND PD<1997
L5 359 S L1 AND PD<1996
L6 0 S L5 AND VANADYL SULFATE
L7 0 S L4 AND VANADYL SULFATE
L8 0 S L3 AND VANADYL SULFATE
L9 1 S L2 AND VANADYL SULFATE

=> d 19 kwic

L9 ANSWER 1 OF 1 USPATFULL
PI US 5846544 19981208 <--
DETD . . . 5'6" tall had Type II non-insulin dependent diabetes mellitus for four years, being maintained on a sulfonylurea hypoglycemic agent, specifically **chlorpropamide**, as well as being maintained on a blood pressure medication and a weight controlled medication, and not on a diabetic. . .
DETD It is noted that, beginning one month before initial dosage of the herbs, subject took **vanadyl sulfate** (5,000 mcg) chromium picolinate (250 mcg), and a multi-vitamin capsule once daily with a meal, with no effect on blood sugar level. **Vanadyl sulfate** and chromium picolinate are known hypoglycemic agents. When subject's blood sugar level was reduced to approximately 200 mg/dl, subject began. . .
DETD Subject is on vitamin and mineral supplements, including **vanadyl sulfate** and chromium picolinate and gymnema sylvestre, which are known hypoglycemic agents.
DETD . . . reducers such as penicillin and its derivatives such as, amoxycillin, as well as mineral hypoglycemic agents as chromium picolinate and **vanadyl sulfate**, (iv) insulin dependent diabetes mellitus subjects will experience hyperglycemia

especially in the early stages of treatment if the bilberry and. . .

=> d 15 359, 1

L5 ANSWER 359 OF 359 USPATFULL
AN 72:32607 USPATFULL
TI EXO-DIBICYCLOALKANE CARBOXAMIDES
IN Rynbrandt, Ronald H., Portage, MI, United States
PA The Upjohn Company, Kalamazoo, MI, United States
PI US 3673197 19720627 <--
AI US 1971-106602 19710114 (5)
DT Utility
FS Granted
LN.CNT 506
INCL INCLM: 260/295.000AM
INCLS: 260/557.000B; 260/295.000D; 260/295.000K; 424/320.000;
424/263.000
NCL NCLM: 546/309.000
NCLS: 514/866.000; 564/152.000; 564/155.000; 564/158.000
IC [1]
ICM: C07D031-44
ICS: C07C103-19
EXF 260/557B; 260/295AM; 260/295R; 260/295D
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 1 OF 359 USPATFULL
AN 1999:140916 USPATFULL
TI Controlled release device and method
IN Cardamone, Michael, Thomastown, Australia
Bentley, Herbert William, Sylvania, Australia
PA Controlled Release Technologies Pty Ltd, Victoria, Australia (non-U.S.
corporation)
PI US 5980508 19991109
WO 9535131 19951228 <--
AI US 1997-750894 19970430 (8)
WO 1995-AU366 19950622
19970430 PCT 371 date
19970430 PCT 102(e) date
PRAI AU 1994-6413 19940622
AU 1995-1866 19950321
DT Utility
FS Granted
LN.CNT 1424
INCL INCLM: 604/890.100
NCL NCLM: 604/890.100
IC [6]
ICM: A61K009-22
EXF 604/892.1; 604/890.1; 604/891.1; 424/449; 424/473
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 15 1,359 kwic

L5 ANSWER 1 OF 359 USPATFULL
PI US 5980508 19991109 <--
WO 9535131 19951228
SUMM . . . tetracyclin compounds, vasodilators, acetaminophen,
acetazolamide, acetophenetidin, achromycine hydrochloride,
bendofluazide, benzthiozide, betamethasone, calcium and salts, thereof
including, leucovorin calcium, carbamazepine, clindamycin,
chlorpropamide, chlorothalidone, chlorothiazide, clofibrate,

cortisone acetate, cyclopenthiiazide, dexamethazone, dextroamphetamine sulphate, diclofenac sodium, digoxin, dimethindene and salts thereof, diprophylline, disopyramide and salts. . .

L5 ANSWER 359 OF 359 USPATFULL

PI US 3673197 19720627

DETD . . . active ingredients, the present compositions can also include, as supplementary active ingredients, other blood sugar lowering compounds, such as tolbutamide, **chlorpropamide**, and phenformin. Such supplementary active ingredients can be included in these compositions in amounts approximately equal to or less than. . .

Welcome to STN International! Enter x:x

LOGINID:sssptaul25txc

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

| | | | |
|------|----|--------|---|
| NEWS | 1 | | Web Page URLs for STN Seminar Schedule - N. America |
| NEWS | 2 | Apr 08 | "Ask CAS" for self-help around the clock |
| NEWS | 3 | Jun 03 | New e-mail delivery for search results now available |
| NEWS | 4 | Aug 08 | PHARMAMarketLetter(PHARMAML) - new on STN |
| NEWS | 5 | Aug 19 | Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN |
| NEWS | 6 | Aug 26 | Sequence searching in REGISTRY enhanced |
| NEWS | 7 | Sep 03 | JAPIO has been reloaded and enhanced |
| NEWS | 8 | Sep 16 | Experimental properties added to the REGISTRY file |
| NEWS | 9 | Sep 16 | CA Section Thesaurus available in CAPLUS and CA |
| NEWS | 10 | Oct 01 | CASREACT Enriched with Reactions from 1907 to 1985 |
| NEWS | 11 | Oct 24 | BEILSTEIN adds new search fields |
| NEWS | 12 | Oct 24 | Nutraceuticals International (NUTRACEUT) now available on STN |
| NEWS | 13 | Nov 18 | DKILIT has been renamed APOLLIT |
| NEWS | 14 | Nov 25 | More calculated properties added to REGISTRY |
| NEWS | 15 | Dec 04 | CSA files on STN |
| NEWS | 16 | Dec 17 | PCTFULL now covers WP/PCT Applications from 1978 to date |
| NEWS | 17 | Dec 17 | TOXCENTER enhanced with additional content |
| NEWS | 18 | Dec 17 | Adis Clinical Trials Insight now available on STN |
| NEWS | 19 | Jan 29 | Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC |
| NEWS | 20 | Feb 13 | CANCERLIT is no longer being updated |
| NEWS | 21 | Feb 24 | METADEX enhancements |
| NEWS | 22 | Feb 24 | PCTGEN now available on STN |
| NEWS | 23 | Feb 24 | TEMA now available on STN |
| NEWS | 24 | Feb 26 | NTIS now allows simultaneous left and right truncation |
| NEWS | 25 | Feb 26 | PCTFULL now contains images |
| NEWS | 26 | Mar 04 | SDI PACKAGE for monthly delivery of multifile SDI results |
| NEWS | 27 | Mar 20 | EVENTLINE will be removed from STN |
| NEWS | 28 | Mar 24 | PATDPAFULL now available on STN |
| NEWS | 29 | Mar 24 | Additional information for trade-named substances without structures available in REGISTRY |
| NEWS | 30 | Apr 11 | Display formats in DGENE enhanced |
| NEWS | 31 | Apr 14 | MEDLINE Reload |
| NEWS | 32 | Apr 17 | Polymer searching in REGISTRY enhanced |
| NEWS | 33 | Apr 21 | Indexing from 1947 to 1956 being added to records in CA/CAPLUS |
| NEWS | 34 | Apr 21 | New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX |
| NEWS | 35 | Apr 28 | RDISCLOSURE now available on STN |
| NEWS | 36 | May 05 | Pharmacokinetic information and systematic chemical names added to PHAR |
| NEWS | 37 | May 15 | MEDLINE file segment of TOXCENTER reloaded |
| NEWS | 38 | May 15 | Supporter information for ENCOMPPAT and ENCOMPLIT updated |
| NEWS | 39 | May 16 | CHEMREACT will be removed from STN |
| NEWS | 40 | May 19 | Simultaneous left and right truncation added to WSCA |
| NEWS | 41 | May 19 | RAPRA enhanced with new search field, simultaneous left and right truncation |

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT

MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
 AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

| | |
|------------|---|
| NEWS HOURS | STN Operating Hours Plus Help Desk Availability |
| NEWS INTER | General Internet Information |
| NEWS LOGIN | Welcome Banner and News Items |
| NEWS PHONE | Direct Dial and Telecommunication Network Access to STN |
| NEWS WWW | CAS World Wide Web Site (general information) |

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 12:44:54 ON 21 MAY 2003

=> ile uspatfull

ILE IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> file uspatfull

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'USPATFULL' ENTERED AT 12:45:11 ON 21 MAY 2003

CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 20 May 2003 (20030520/PD)

FILE LAST UPDATED: 20 May 2003 (20030520/ED)

HIGHEST GRANTED PATENT NUMBER: US6567988

HIGHEST APPLICATION PUBLICATION NUMBER: US2003093849

CA INDEXING IS CURRENT THROUGH 20 May 2003 (20030520/UPCA)

ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 20 May 2003 (20030520/PD)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2003

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2003

```
>>> USPAT2 is now available. USPATFULL contains full text of the <<<
>>> original, i.e., the earliest published granted patents or <<<
>>> applications. USPAT2 contains full text of the latest US <<<
>>> publications, starting in 2001, for the inventions covered in <<<
>>> USPATFULL. A USPATFULL record contains not only the original <<<
>>> published document but also a list of any subsequent <<<
>>> publications. The publication number, patent kind code, and <<<
>>> publication date for all the US publications for an invention <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc. <<<
```

```
>>> USPATFULL and USPAT2 can be accessed and searched together <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to <<<
>>> enter this cluster. <<<
```

```
>>> Use USPATALL when searching terms such as patent assignees, <<<
>>> classifications, or claims, that may potentially change from <<<
```

>>> the earliest to the latest publication.

<<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s vanadyl sulfate and sulfonylurea? and vitamin

3544 VANADYL
231630 SULFATE
682 VANADYL SULFATE
(VANADYL(W) SULFATE)
3488 SULFONYLUREA?
29638 VITAMIN

L1 52 VANADYL SULFATE AND SULFONYLUREA? AND VITAMIN

=> s l1 and diabetes

24701 DIABETES

L2 52 L1 AND DIABETES

=> s l2 and pd<1998

2268293 PD<1998
(PD<19980000)

L3 0 L2 AND PD<1998

=> d l2 1-52

L2 ANSWER 1 OF 52 USPATFULL

AN 2003:120997 USPATFULL

TI 25 human prostate and prostate cancer associated proteins

IN Birse, Charles E., North Potomac, MD, UNITED STATES

Rosen, Craig A., Laytonsville, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)

PI US 2003083481 A1 20030501

AI US 2002-36542 A1 20020107 (10)

RLI Continuation-in-part of Ser. No. WO 2000-US19666, filed on 20 Jul 2000, UNKNOWN

PRAI US 1999-144972P 19990721 (60)

US 1999-148681P 19990813 (60)

US 1999-149173P 19990817 (60)

US 1999-158004P 19991006 (60)

US 2000-194689P 20000405 (60)

DT Utility

FS APPLICATION

LN.CNT 26241

INCL INCLM: 536/023.100

NCL NCLM: 536/023.100

IC [7]

ICM: C07H021-02

ICS: C07H021-04

L2 ANSWER 2 OF 52 USPATFULL

AN 2003:113528 USPATFULL

TI Biguanide and **sulfonylurea** formulations for the prevention and treatment of insulin resistance and type 2 **diabetes** mellitus

IN Pearson, Don C., Lakewood, WA, UNITED STATES

Richardson, Kenneth T., Anchorage, AK, UNITED STATES

PA ChronoRX, LLC, Anchorage, AK, UNITED STATES (U.S. corporation)

PI US 2003078269 A1 20030424

AI US 2002-93476 A1 20020307 (10)

PRAI US 2001-278270P 20010322 (60)

US 2001-278271P 20010322 (60)

US 2001-278296P 20010322 (60)

DT Utility
FS APPLICATION
LN.CNT 4927
INCL INCLM: 514/251.000
INCLS: 514/553.000; 514/474.000; 514/561.000; 514/630.000
NCL NCLM: 514/251.000
NCLS: 514/553.000; 514/474.000; 514/561.000; 514/630.000
IC [7]
ICM: A61K031-525
ICS: A61K031-198; A61K031-185; A61K031-16; A61K031-375
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 3 OF 52. USPTAFULL
AN 2003:112605 USPTAFULL
TI Formulations for the prevention and treatment of insulin resistance and type 2 **diabetes** mellitus
IN Richardson, Kenneth T., Anchorage, AK, UNITED STATES
Pearson, Don C., Lakewood, WA, UNITED STATES
PA ChronoRX LLC, Anchorage, AK (U.S. corporation)
PI US 2003077335 A1 20030424
AI US 2001-33730 A1 20011102 (10)
PRAI US 2000-245471P 20001103 (60)
US 2000-245950P 20001103 (60)
US 2000-256033P 20001213 (60)
DT Utility
FS APPLICATION
LN.CNT 4450
INCL INCLM: 424/682.000
INCLS: 514/251.000; 514/440.000; 514/474.000; 514/553.000; 514/561.000;
514/642.000; 514/635.000; 514/592.000
NCL NCLM: 424/682.000
NCLS: 514/251.000; 514/440.000; 514/474.000; 514/553.000; 514/561.000;
514/642.000; 514/635.000; 514/592.000
IC [7]
ICM: A61K031-525
ICS: A61K031-385; A61K031-375; A61K031-198; A61K033-06

L2 ANSWER 4 OF 52 USPTAFULL
AN 2003:100081 USPTAFULL
TI Inhibition by 3-deoxyflavonoids of T-lymphocyte activation and therapies related thereto
IN Lahey, Thomas P., Laguna Niguel, CA, UNITED STATES
Rajadhyaksha, V.J., Mission Viejo, CA, UNITED STATES
PA SynorX, Inc., San Clemente, CA, UNITED STATES, 92673 (U.S. corporation)
PI US 2003069192 A1 20030410
AI US 2002-236861 A1 20020906 (10)
PRAI US 2001-317666P 20010906 (60)
DT Utility
FS APPLICATION
LN.CNT 1300
INCL INCLM: 514/027.000
INCLS: 514/100.000; 514/227.800; 514/232.500; 514/254.110; 514/320.000;
514/422.000; 514/456.000; 536/008.000; 544/060.000; 544/151.000;
544/376.000; 546/196.000; 548/525.000; 549/403.000
NCL NCLM: 514/027.000
NCLS: 514/100.000; 514/227.800; 514/232.500; 514/254.110; 514/320.000;
514/422.000; 514/456.000; 536/008.000; 544/060.000; 544/151.000;
544/376.000; 546/196.000; 548/525.000; 549/403.000
IC [7]
ICM: A61K031-7048
ICS: A61K031-665; A61K031-541; A61K031-5377; A61K031-496; A61K031-453;
A61K031-4025; A61K031-353

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 5 OF 52 USPATFULL
AN 2003:72168 USPATFULL
TI 64 human secreted proteins
IN Ruben, Steven M., Olney, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Greene, John M., Gaithersburg, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
Feng, Ping, Gaithersburg, MD, UNITED STATES
Florence, Kimberly A., Rockville, MD, UNITED STATES
Hu, Jing-Shan, Mountain View, CA, UNITED STATES
Ferrie, Ann M., Tewksbury, MA, UNITED STATES
Yu, Guo-Liang, Berkeley, CA, UNITED STATES
Duan, Roxanne D., Bethesda, MD, UNITED STATES
Janat, Fouad, Westerly, RI, UNITED STATES
PI US 2003050455 A1 20030313
AI US 2001-776724 A1 20010206 (9)
RLI Continuation-in-part of Ser. No. US 2000-669688, filed on 26 Sep 2000,
PENDING Continuation of Ser. No. US 1999-229982, filed on 14 Jan 1999,
PENDING Continuation-in-part of Ser. No. WO 1998-US14613, filed on 15
Jul 1998, UNKNOWN
PRAI US 2000-180909P 20000208 (60)
US 1997-53442P 19970722 (60)
US 1997-56359P 19970818 (60)
US 1997-52661P 19970716 (60)
US 1997-52872P 19970716 (60)
US 1997-52871P 19970716 (60)
US 1997-52874P 19970716 (60)
US 1997-52873P 19970716 (60)
US 1997-52870P 19970716 (60)
US 1997-52875P 19970716 (60)
US 1997-53440P 19970722 (60)
US 1997-53441P 19970722 (60)
DT Utility
FS APPLICATION
LN.CNT 21934
INCL INCLM: 536/023.100
NCL NCLM: 536/023.100
IC [7]
ICM: C07H021-02
ICS: C07H021-04

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 6 OF 52 USPATFULL
AN 2003:71333 USPATFULL
TI 186 human secreted proteins
IN Ruben, Steven M., Olney, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Carter, Kenneth C., North Potomac, MD, UNITED STATES
Bednarik, Daniel P., Columbia, MD, UNITED STATES
Endress, Gregory A., Florence, MA, UNITED STATES
Yu, Guo-Liang, Berkeley, CA, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
Feng, Ping, Gaithersburg, MD, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Greene, John M., Gaithersburg, MD, UNITED STATES
Ferrie, Ann M., Painted Post, NY, UNITED STATES
Duan, D. Roxanne, Bethesda, MD, UNITED STATES
Hu, Jing-Shan, Mountain View, CA, UNITED STATES

Florence, Kimberly A., Rockville, MD, UNITED STATES
Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
Fischer, Carrie L., Burke, VA, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Brewer, Laurie A., St. Paul, MN, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
LaFleur, David W., Washington, DC, UNITED STATES
Li, Yi, Sunnyvale, CA, UNITED STATES
Zeng, Zhizhen, Lansdale, PA, UNITED STATES
Kyaw, Hla, Frederick, MD, UNITED STATES

PI US 2003049618 A1 20030313

AI US 2001-809391 A1 20010316 (9)

RLI Continuation-in-part of Ser. No. US 1998-149476, filed on 8 Sep 1998,
GRANTED, Pat. No. US 6420526 Continuation-in-part of Ser. No. WO
1998-US4493, filed on 6 Mar 1998, UNKNOWN

PRAI US 2000-190068P 20000317 (60)
US 1997-40162P 19970307 (60)
US 1997-40333P 19970307 (60)
US 1997-38621P 19970307 (60)
US 1997-40626P 19970307 (60)
US 1997-40334P 19970307 (60)
US 1997-40336P 19970307 (60)
US 1997-40163P 19970307 (60)
US 1997-47600P 19970523 (60)
US 1997-47615P 19970523 (60)
US 1997-47597P 19970523 (60)
US 1997-47502P 19970523 (60)
US 1997-47633P 19970523 (60)
US 1997-47583P 19970523 (60)
US 1997-47617P 19970523 (60)
US 1997-47618P 19970523 (60)
US 1997-47503P 19970523 (60)
US 1997-47592P 19970523 (60)
US 1997-47581P 19970523 (60)
US 1997-47584P 19970523 (60)
US 1997-47500P 19970523 (60)
US 1997-47587P 19970523 (60)
US 1997-47492P 19970523 (60)
US 1997-47598P 19970523 (60)
US 1997-47613P 19970523 (60)
US 1997-47582P 19970523 (60)
US 1997-47596P 19970523 (60)
US 1997-47612P 19970523 (60)
US 1997-47632P 19970523 (60)
US 1997-47601P 19970523 (60)
US 1997-43580P 19970411 (60)
US 1997-43568P 19970411 (60)
US 1997-43314P 19970411 (60)
US 1997-43569P 19970411 (60)
US 1997-43311P 19970411 (60)
US 1997-43671P 19970411 (60)
US 1997-43674P 19970411 (60)
US 1997-43669P 19970411 (60)
US 1997-43312P 19970411 (60)
US 1997-43313P 19970411 (60)
US 1997-43672P 19970411 (60)
US 1997-43315P 19970411 (60)
US 1997-48974P 19970606 (60)
US 1997-56886P 19970822 (60)
US 1997-56877P 19970822 (60)
US 1997-56889P 19970822 (60)

| | |
|----------------|---------------|
| US 1997-56893P | 19970822 (60) |
| US 1997-56630P | 19970822 (60) |
| US 1997-56878P | 19970822 (60) |
| US 1997-56662P | 19970822 (60) |
| US 1997-56872P | 19970822 (60) |
| US 1997-56882P | 19970822 (60) |
| US 1997-56637P | 19970822 (60) |
| US 1997-56903P | 19970822 (60) |
| US 1997-56888P | 19970822 (60) |
| US 1997-56879P | 19970822 (60) |
| US 1997-56880P | 19970822 (60) |
| US 1997-56894P | 19970822 (60) |
| US 1997-56911P | 19970822 (60) |
| US 1997-56636P | 19970822 (60) |
| US 1997-56874P | 19970822 (60) |
| US 1997-56910P | 19970822 (60) |
| US 1997-56864P | 19970822 (60) |
| US 1997-56631P | 19970822 (60) |
| US 1997-56845P | 19970822 (60) |
| US 1997-56892P | 19970822 (60) |
| US 1997-57761P | 19970905 (60) |
| US 1997-47595P | 19970523 (60) |
| US 1997-47599P | 19970523 (60) |
| US 1997-47588P | 19970523 (60) |
| US 1997-47585P | 19970523 (60) |
| US 1997-47586P | 19970523 (60) |
| US 1997-47590P | 19970523 (60) |
| US 1997-47594P | 19970523 (60) |
| US 1997-47589P | 19970523 (60) |
| US 1997-47593P | 19970523 (60) |
| US 1997-47614P | 19970523 (60) |
| US 1997-43578P | 19970411 (60) |
| US 1997-43576P | 19970411 (60) |
| US 1997-47501P | 19970523 (60) |
| US 1997-43670P | 19970411 (60) |
| US 1997-56632P | 19970822 (60) |
| US 1997-56664P | 19970822 (60) |
| US 1997-56876P | 19970822 (60) |
| US 1997-56881P | 19970822 (60) |
| US 1997-56909P | 19970822 (60) |
| US 1997-56875P | 19970822 (60) |
| US 1997-56862P | 19970822 (60) |
| US 1997-56887P | 19970822 (60) |
| US 1997-56908P | 19970822 (60) |
| US 1997-48964P | 19970606 (60) |
| US 1997-57650P | 19970905 (60) |
| US 1997-56884P | 19970822 (60) |
| US 1997-57669P | 19970905 (60) |
| US 1997-49610P | 19970613 (60) |
| US 1997-61660P | 19971009 (60) |
| US 1997-51926P | 19970708 (60) |
| US 1997-52874P | 19970716 (60) |
| US 1997-58785P | 19970912 (60) |
| US 1997-55724P | 19970818 (60) |

DT Utility
FS APPLICATION

LN.CNT 26235

INCL INCLM: 435/006.000
INCLS: 435/069.100; 435/183.000; 435/320.100; 435/325.000; 530/350.000;
536/023.100

NCL NCLM: 435/006.000
NCLS: 435/069.100; 435/183.000; 435/320.100; 435/325.000; 530/350.000;

536/023.100

IC [7]
ICM: C12Q001-68
ICS: C07H021-04; C12N009-00; C12N005-06; C12P021-02; C07K014-435

L2 ANSWER 7 OF 52 USPATFULL
AN 2003:38352 USPATFULL
TI 143 human secreted proteins
IN Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Komatsoulis, George A., Silver Spring, MD, UNITED STATES
Birse, Charles E., North Potomac, MD, UNITED STATES
Duan, Roxanne D., Bethesda, MD, UNITED STATES
Florence, Kimberly A., Rockville, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
PI US 2003027999 A1 20030206
AI US 2001-986480 A1 20011108 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US12788, filed on 11 May 2000,
UNKNOWN
PRAI US 1999-134068P 19990513 (60)
DT Utility
FS APPLICATION
LN.CNT 29687
INCL INCLM: 536/023.100
NCL NCLM: 536/023.100
IC [7]
ICM: C07H021-02
ICS: C07H021-04
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 8 OF 52 USPATFULL
AN 2003:38129 USPATFULL
TI 29 human cancer associated proteins
IN Roschke, Viktor, Rockville, MD, UNITED STATES
PI US 2003027776 A1 20030206
AI US 2001-23896 A1 20011221 (10)
RLI Continuation-in-part of Ser. No. WO 2000-US23794, filed on 30 Aug 2000,
UNKNOWN
PRAI US 1999-152296P 19990903 (60)
US 1999-158003P 19991006 (60)
DT Utility
FS APPLICATION
LN.CNT 23049
INCL INCLM: 514/044.000
INCLS: 536/023.100; 530/350.000; 435/006.000; 435/007.230; 435/069.100;
435/325.000; 435/320.100
NCL NCLM: 514/044.000
NCLS: 536/023.100; 530/350.000; 435/006.000; 435/007.230; 435/069.100;
435/325.000; 435/320.100
IC [7]
ICM: A61K048-00
ICS: C12Q001-68; G01N033-574; C07H021-04
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 9 OF 52 USPATFULL
AN 2003:30391 USPATFULL
TI Kunitz-type protease inhibitor polynucleotides, polypeptides, and
antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)
PI US 2003022338 A1 20030130
AI US 2002-125522 A1 20020419 (10)
RLI Continuation of Ser. No. US 2001-858718, filed on 17 May 2001, PENDING
Continuation-in-part of Ser. No. WO 2000-US31917, filed on 21 Nov 2000,
UNKNOWN
PRAI US 1999-166751P 19991122 (60)
DT Utility
FS APPLICATION
LN.CNT 12021
INCL INCLM: 435/194.000
INCLS: 435/320.100; 435/325.000; 536/023.200; 435/069.100
NCL NCLM: 435/194.000
NCLS: 435/320.100; 435/325.000; 536/023.200; 435/069.100
IC [7]
ICM: C12N009-12
ICS: C07H021-04; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 10 OF 52 USPATFULL
AN 2003:18018 USPATFULL
TI Composition, synthesis and therapeutic applications of polyamines
IN Murphy, Michael A., La Jolla, CA, UNITED STATES
MaLachowski, Mitchell R., San Diego, CA, UNITED STATES
PI US 2003013772 A1 20030116
AI US 2001-17235 A1 20011218 (10)
RLI Continuation-in-part of Ser. No. US 2000-486310, filed on 23 Feb 2000,
PENDING A 371 of International Ser. No. WO 1998-US17301, filed on 21 Aug
1998, UNKNOWN A 371 of International Ser. No. US 1997-915660, filed on
21 Aug 1997, GRANTED, Pat. No. US 5906996
DT Utility
FS APPLICATION
LN.CNT 3034
INCL INCLM: 514/674.000
INCLS: 564/512.000
NCL NCLM: 514/674.000
NCLS: 564/512.000
IC [7]
ICM: A61K031-13
ICS: C07C211-14
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 11 OF 52 USPATFULL
AN 2002:344413 USPATFULL
TI B7-like polynucleotides, polypeptides, and antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
Chen, Lieping, Rochester, MN, UNITED STATES
Baker, Kevin P., Darnestown, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
PI US 2002198143 A1 20021226
AI US 2001-790622 A1 20010223 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US23792, filed on 30 Aug 2000,
UNKNOWN
PRAI US 1999-152317P 19990903 (60)
US 2000-200346P 20000428 (60)
DT Utility
FS APPLICATION
LN.CNT 12424
INCL INCLM: 514/012.000
INCLS: 435/069.100; 435/320.100; 435/325.000; 536/023.500
NCL NCLM: 514/012.000

NCLS: 435/069.100; 435/320.100; 435/325.000; 536/023.500

IC [7]

ICM: A61K038-17

ICS: C12P021-02; C12N005-06; C07H021-04

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 12 OF 52 USPATFULL

AN 2002:343975 USPATFULL

TI Serine protease polynucleotides, polypeptides, and antibodies

IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

Ni, Jian, Germantown, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)

PI US 2002197701 A1 20021226

AI US 2002-67761 A1 20020208 (10)

RLI Continuation of Ser. No. US 2001-804156, filed on 13 Mar 2001, PENDING

PRAI US 2000-189025P 20000314 (60)

DT Utility

FS APPLICATION

LN.CNT 13077

INCL INCLM: 435/226.000

INCLS: 435/069.100; 435/320.100; 435/325.000; 536/023.200

NCL NCLM: 435/226.000

NCLS: 435/069.100; 435/320.100; 435/325.000; 536/023.200

IC [7]

ICM: C12N009-64

ICS: C07H021-04; C12P021-02; C12N005-06

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 13 OF 52 USPATFULL

AN 2002:337390 USPATFULL

TI Human polynucleotides, polypeptides, and antibodies

IN Moore, Paul A., Germantown, MD, UNITED STATES

Coleman, Timothy A., Gaithersburg, MD, UNITED STATES

Gentz, Reiner L., Rockville, MD, UNITED STATES

Dillon, Patrick J., Carlsbad, CA, UNITED STATES

Ni, Jian, Germantown, MD, UNITED STATES

Li, Yi, Sunnyvale, CA, UNITED STATES

Endress, Gregory A., Florence, MA, UNITED STATES

Soppet, Daniel R., Centreville, VA, UNITED STATES

PI US 2002192749 A1 20021219

AI US 2001-969384 A1 20011003 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US10542, filed on 2 Apr 2001, UNKNOWN

PRAI US 2000-194118P 20000403 (60)

US 2000-236384P 20000929 (60)

DT Utility

FS APPLICATION

LN.CNT 13925

INCL INCLM: 435/069.100

INCLS: 435/183.000; 435/325.000; 435/320.100; 530/350.000; 536/023.200

NCL NCLM: 435/069.100

NCLS: 435/183.000; 435/325.000; 435/320.100; 530/350.000; 536/023.200

IC [7]

ICM: C12P021-02

ICS: C12N005-06; C07H021-04; C12N009-00; C07K014-435

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 14 OF 52 USPATFULL

AN 2002:322538 USPATFULL

TI ADAM polynucleotides, polypeptides, and antibodies

IN Ruben, Steven M., Olney, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
Hastings, Gregg A., Westlake Village, CA, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Wei, Ping, Brookeville, MD, UNITED STATES
PI US 2002182702 A1 20021205
AI US 2001-955504 A1 20010919 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US14308, filed on 25 May 2000,
UNKNOWN Continuation-in-part of Ser. No. US 2000-712907, filed on 16 Nov
2000, PENDING
PRAI US 2000-234222P 20000921 (60)
US 1999-136388P 19990527 (60)
US
US
US 1999-136388P 19990527 (60)
US 1999-142930P 19990709 (60)
US 2000-178717P 20000128 (60)
DT Utility
FS APPLICATION
LN.CNT 13921
INCL INCLM: 435/226.000
INCLS: 435/325.000; 435/320.100; 435/069.100; 536/023.200
NCL NCLM: 435/226.000
NCLS: 435/325.000; 435/320.100; 435/069.100; 536/023.200
IC [7]
ICM: C12N009-64
ICS: C07H021-04; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 15 OF 52 USPATFULL
AN 2002:308509 USPATFULL
TI ADAM polynucleotides, polypeptides, and antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
Hastings, Gregg A., Westlake Village, CA, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Wei, Ping, Brookeville, MD, UNITED STATES
PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES (U.S.
corporation)
PI US 2002173640 A1 20021121
AI US 2002-125452 A1 20020419 (10)
RLI Continuation of Ser. No. US 2001-955504, filed on 19 Sep 2001, PENDING
Continuation of Ser. No. US 2000-712907, filed on 16 Nov 2000, PENDING
Continuation of Ser. No. WO 2000-US14308, filed on 25 May 2000, UNKNOWN
PRAI US 2000-234222P 20000921 (60)
US 1999-136388P 19990527 (60)
US 1999-142930P 19990709 (60)
US 2000-178717P 20000128 (60)
DT Utility
FS APPLICATION
LN.CNT 13925
INCL INCLM: 536/023.200
INCLS: 435/226.000; 435/069.100; 435/325.000; 435/320.100
NCL NCLM: 536/023.200
NCLS: 435/226.000; 435/069.100; 435/325.000; 435/320.100
IC [7]
ICM: C07H021-04
ICS: C12P021-06; C12N009-64; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 16 OF 52 USPATFULL
AN 2002:308333 USPATFULL

TI Protein tyrosine kinase receptor polynucleotides, polypeptides, and antibodies
 IN Ruben, Steven M., Olney, MD, UNITED STATES
 Shi, Yanggu, Gaithersburg, MD, UNITED STATES
 Young, Paul E., Gaithersburg, MD, UNITED STATES
 Ni, Jian, Germantown, MD, UNITED STATES
 PI US 2002173458 A1 20021121
 AI US 2001-836392 A1 20010418 (9)
 RLI Continuation-in-part of Ser. No. WO 2000-US28066, filed on 12 Oct 2000, UNKNOWN
 PRAI US 1999-159542P 19991015 (60)
 US 1999-165914P 19991117 (60)
 US 2000-189027P 20000314 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 13395
 INCL INCLM: 514/012.000
 INCLS: 435/194.000; 435/325.000; 435/320.100; 435/069.100; 536/023.200
 NCL NCLM: 514/012.000
 NCLS: 435/194.000; 435/325.000; 435/320.100; 435/069.100; 536/023.200
 IC [7]
 ICM: A61K038-17
 ICS: C07H021-04; C12N009-12; C12P021-02; C12N005-06
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 17 OF 52 USPATFULL
 AN 2002:307870 USPATFULL
 TI 28 human secreted proteins
 IN Ruben, Steven M., Olney, MD, UNITED STATES
 Rosen, Craig A., Laytonsville, MD, UNITED STATES
 Li, Yi, Sunnyvale, CA, UNITED STATES
 Zeng, Zhizhen, Lansdale, PA, UNITED STATES
 Kyaw, Hla, Frederick, MD, UNITED STATES
 Fischer, Carrie L., Burke, VA, UNITED STATES
 Li, Haodong, Gaithersburg, MD, UNITED STATES
 Soppet, Daniel R., Centreville, VA, UNITED STATES
 Gentz, Reiner L., Rockville, MD, UNITED STATES
 Wei, Ying-Fei, Berkeley, CA, UNITED STATES
 Moore, Paul A., Germantown, MD, UNITED STATES
 Young, Paul E., Gaithersburg, MD, UNITED STATES
 Greene, John M., Gaithersburg, MD, UNITED STATES
 Ferrie, Ann M., Tewksbury, MA, UNITED STATES
 PI US 2002172994 A1 20021121
 AI US 2001-852797 A1 20010511 (9)
 RLI Continuation-in-part of Ser. No. US 1998-152060, filed on 11 Sep 1998, PENDING Continuation-in-part of Ser. No. WO 1998-US4858, filed on 12 Mar 1998, UNKNOWN
 PRAI US 2001-265583P 20010202 (60)
 US 1997-40762P 19970314 (60)
 US 1997-40710P 19970314 (60)
 US 1997-50934P 19970530 (60)
 US 1997-48100P 19970530 (60)
 US 1997-48357P 19970530 (60)
 US 1997-48189P 19970530 (60)
 US 1997-57765P 19970905 (60)
 US 1997-48970P 19970606 (60)
 US 1997-68368P 19971219 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 17794
 INCL INCLM: 435/069.100
 INCLS: 435/226.000; 435/325.000; 435/320.100; 536/023.200

NCL NCLM: 435/069.100
NCLS: 435/226.000; 435/325.000; 435/320.100; 536/023.200
IC [7]
ICM: C12P021-02
ICS: C12N005-06; C07H021-04; C12N009-64
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 18 OF 52 USPATFULL
AN 2002:295334 USPATFULL
TI Steroid hormone receptor polynucleotides, polypeptides, and antibodies
IN Ni, Jian, Germantown, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)
PI US 2002165384 A1 20021107
AI US 2002-103511 A1 20020322 (10)
RLI Continuation of Ser. No. US 2001-805204, filed on 14 Mar 2001, PENDING
Continuation-in-part of Ser. No. WO 2000-US24517, filed on 7 Sep 2000, UNKNOWN
PRAI US 2000-189032P 20000314 (60)
US 1999-152932P 19990909 (60)
DT Utility
FS APPLICATION
LN.CNT 11571
INCL INCLM: 536/023.500
INCLS: 530/350.000; 435/069.100; 435/320.100; 435/325.000
NCL NCLM: 536/023.500
NCLS: 530/350.000; 435/069.100; 435/320.100; 435/325.000
IC [7]
ICM: C07H021-04
ICS: C07K014-72; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 19 OF 52 USPATFULL
AN 2002:294650 USPATFULL
TI TM4SF receptor polynucleotides, polypeptides, and antibodies
IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PA Human Genome Sciences, Inc., Rockville, MD, 20850 (U.S. corporation)
PI US 2002164693 A1 20021107
AI US 2001-972970 A1 20011010 (9)
RLI Continuation-in-part of Ser. No. WO 2001-US11130, filed on 5 Apr 2001, UNKNOWN
PRAI US 2000-195336P 20000410 (60)
DT Utility
FS APPLICATION
LN.CNT 11940
INCL INCLM: 435/069.100
INCLS: 435/325.000; 435/320.100; 435/006.000; 435/007.100; 530/350.000;
536/023.500; 530/388.220
NCL NCLM: 435/069.100
NCLS: 435/325.000; 435/320.100; 435/006.000; 435/007.100; 530/350.000;
536/023.500; 530/388.220
IC [7]
ICM: C12Q001-68
ICS: G01N033-53; C07H021-04; C12P021-02; C12N005-06; C07K014-715;
C07K016-28
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 20 OF 52 USPATFULL
AN 2002:294649 USPATFULL

TI Immune system-related polynucleotides, polypeptides, and antibodies
IN Ni, Jian, Germantown, MD, UNITED STATES
Hilbert, David, Bethesda, MD, UNITED STATES
Kenny, Joseph J., Damascus, MD, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
Choi, Gil H., Rockville, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Gruber, Joachim R., Dallas, TX, UNITED STATES
Endress, Gregory A., Florence, MA, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002164692 A1 20021107

AI US 2001-949842 A1 20010912 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US7260, filed on 7 Mar 2001,
UNKNOWN

PRAI US 2000-187873P 20000308 (60)

US 2000-224367P 20000811 (60)

DT Utility

FS APPLICATION

LN.CNT 13952

INCL INCLM: 435/069.100

INCLS: 435/183.000; 435/320.100; 435/325.000; 536/023.200

NCL NCLM: 435/069.100

NCLS: 435/183.000; 435/320.100; 435/325.000; 536/023.200

IC [7]

ICM: C12N009-00

ICS: C07H021-04; C12P021-02; C12N005-06

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 21 OF 52 USPATFULL

AN 2002:287630 USPATFULL

TI Serine/threonine phosphatase polynucleotides, polypeptides, and
antibodies

IN Ebner, Reinhard, Gaithersburg, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002160493 A1 20021031

AI US 2001-941831 A1 20010830 (9)

RLI Continuation-in-part of Ser. No. WO 2001-US6256, filed on 28 Feb 2001,
UNKNOWN

PRAI US 2000-186350P 20000302 (60)

DT Utility

FS APPLICATION

LN.CNT 14729

INCL INCLM: 435/226.000

INCLS: 435/069.100; 435/325.000; 435/320.100; 536/023.200

NCL NCLM: 435/226.000

NCLS: 435/069.100; 435/325.000; 435/320.100; 536/023.200

IC [7]

ICM: C12N009-64

ICS: C07H021-04; C12P021-02; C12N005-06

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 22 OF 52 USPATFULL

AN 2002:287628 USPATFULL

TI Human Serpin polynucleotides, polypeptides, and antibodies

IN Ni, Jian, Germantown, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

Shi, Yanggu, Gaithersburg, MD, UNITED STATES

PI US 2002160491 A1 20021031

AI US 2001-912628 A1 20010726 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US5082, filed on 29 Feb 2000,
UNKNOWN Continuation-in-part of Ser. No. WO 2001-US2484, filed on 26 Jan

2001, UNKNOWN
PRAI US 2000-178769P 20000128 (60)
DT Utility
FS APPLICATION
LN.CNT 12380
INCL INCLM: 435/226.000
INCLS: 435/069.100; 435/325.000; 435/320.100; 536/023.200
NCL NCLM: 435/226.000
NCLS: 435/069.100; 435/325.000; 435/320.100; 536/023.200
IC [7]
ICM: C12N009-64
ICS: C07H021-04; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 23 OF 52 USPATFULL
AN 2002:272888 USPATFULL
TI Human polynucleotides, polypeptides, and antibodies
IN Ni, Jian, Germantown, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)
PI US 2002151009 A1 20021017
AI US 2001-939825 A1 20010828 (9)
RLI Continuation-in-part of Ser. No. WO 2001-US5498, filed on 22 Feb 2001, UNKNOWN
PRAI US 2000-184664P 20000224 (60)
US 2000-189874P 20000316 (60)
DT Utility
FS APPLICATION
LN.CNT 14831
INCL INCLM: 435/183.000
INCLS: 435/006.000; 435/069.100; 435/325.000; 435/320.100; 536/023.200
NCL NCLM: 435/183.000
NCLS: 435/006.000; 435/069.100; 435/325.000; 435/320.100; 536/023.200
IC [7]
ICM: C12N009-00
ICS: C12Q001-68; C07H021-04; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 24 OF 52 USPATFULL
AN 2002:221965 USPATFULL
TI Steroid hormone receptor polynucleotides, polypeptides, and antibodies
IN Ni, Jian, Germantown, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002120110 A1 20020829
AI US 2001-805204 A1 20010314 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US24517, filed on 7 Sep 2000, UNKNOWN
PRAI US 2000-189032P 20000314 (60)
DT Utility
FS APPLICATION
LN.CNT 11573
INCL INCLM: 536/023.100
INCLS: 530/350.000; 530/387.100
NCL NCLM: 536/023.100
NCLS: 530/350.000; 530/387.100
IC [7]
ICM: C07H021-02
ICS: C07H021-04; C07K001-00; C07K014-00; C07K017-00; C07K016-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 25 OF 52 USPATFULL
AN 2002:221958 USPATFULL
TI 17 human secreted proteins
IN Rosen, Craig A., Laytonsville, MD, UNITED STATES
Komatsoulis, George A., Silver Spring, MD, UNITED STATES
Baker, Kevin P., Darnestown, MD, UNITED STATES
Birse, Charles E., North Potomac, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
Wei, Ping, Brookeville, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Duan, D. Roxanne, Bethesda, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Choi, Gil H., Rockville, MD, UNITED STATES
Fiscella, Michele, Bethesda, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Barash, Steven C., Rockville, MD, UNITED STATES
PI US 2002120103 A1 20020829
AI US 2001-915582 A1 20010727 (9)
RLI Continuation-in-part of Ser. No. WO 2001-US1431, filed on 17 Jan 2001,
UNKNOWN
PRAI US 2000-179065P 20000131 (60)
US 2000-180628P 20000204 (60)
US 2000-231968P 20000912 (60)
DT Utility
FS APPLICATION
LN.CNT 20680
INCL INCLM: 530/350.000
INCLS: 536/023.500; 514/012.000; 435/069.100; 435/325.000; 435/320.100;
435/006.000; 530/388.100
NCL NCLM: 530/350.000
NCLS: 536/023.500; 514/012.000; 435/069.100; 435/325.000; 435/320.100;
435/006.000; 530/388.100
IC [7]
ICM: C12Q001-68
ICS: C07K014-435; C07H021-04; A61K038-17; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 26 OF 52 USPATFULL
AN 2002:221379 USPATFULL
TI Trefoil domain-containing polynucleotides, polypeptides, and antibodies
IN Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002119519 A1 20020829
AI US 2001-891171 A1 20010626 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US34920, filed on 22 Dec 2000,
UNKNOWN
PRAI US 1999-171618P 19991223 (60)
DT Utility
FS APPLICATION
LN.CNT 12171
INCL INCLM: 435/069.100
INCLS: 435/183.000; 435/320.100; 435/325.000; 536/023.200
NCL NCLM: 435/069.100
NCLS: 435/183.000; 435/320.100; 435/325.000; 536/023.200
IC [7]
ICM: C07H021-04

ICS: C12N009-00; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 27 OF 52 USPATFULL
AN 2002:198680 USPATFULL
TI Extracellular matrix polynucleotides, polypeptides, and antibodies
IN Fiscella, Michele, Bethesda, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002106780 A1 20020808
AI US 2001-978249 A1 20011017 (9)
RLI Continuation-in-part of Ser. No. WO 2001-US11643, filed on 11 Apr 2001,
UNKNOWN
PRAI US 2000-198123P 20000418 (60)
DT Utility
FS APPLICATION
LN.CNT 13488
INCL INCLM: 435/226.000
INCLS: 435/069.100; 435/006.000; 435/325.000; 435/320.100; 536/023.200
NCL NCLM: 435/226.000
NCLS: 435/069.100; 435/006.000; 435/325.000; 435/320.100; 536/023.200
IC [7]
ICM: C12N009-64
ICS: C12Q001-68; C07H021-04; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 28 OF 52 USPATFULL
AN 2002:198631 USPATFULL
TI Bcl-2-like polynucleotides, polypeptides, and antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
Duan, D. Roxanne, Bethesda, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
PI US 2002106731 A1 20020808
AI US 2001-912599 A1 20010726 (9)
RLI Continuation-in-part of Ser. No. WO 2001-US3080, filed on 31 Jan 2001,
UNKNOWN
PRAI US 2000-179487P 20000201 (60)
US 2000-180697P 20000207 (60)
DT Utility
FS APPLICATION
LN.CNT 12354
INCL INCLM: 435/069.100
INCLS: 435/006.000; 435/007.230; 435/325.000; 435/320.100; 536/023.200
NCL NCLM: 435/069.100
NCLS: 435/006.000; 435/007.230; 435/325.000; 435/320.100; 536/023.200
IC [7]
ICM: C12P021-02
ICS: C12Q001-68; G01N033-574; C07H021-04
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 29 OF 52 USPATFULL
AN 2002:179165 USPATFULL
TI Plasminogen-like polynucleotides, polypeptides, and antibodies
IN Ni, Jian, Germantown, MD, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002094955 A1 20020718
AI US 2001-832197 A1 20010411 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US27253, filed on 4 Oct 2000,
UNKNOWN
PRAI US 1999-158044P 19991007 (60)

DT Utility
FS APPLICATION
LN.CNT 11038
INCL INCLM: 514/012.000
INCLS: 536/023.200; 435/320.100; 435/325.000; 435/183.000
NCL NCLM: 514/012.000
NCLS: 536/023.200; 435/320.100; 435/325.000; 435/183.000
IC [7]
ICM: A61K038-17
ICS: C07H021-04; C12N009-00; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 30 OF 52 USPATFULL
AN 2002:171946 USPATFULL
TI Kunitz-type protease inhibitor polynucleotides, polypeptides, and antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
PI US 2002090695 A1 20020711
AI US 2001-858718 A1 20010517 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US31917, filed on 21 Nov 2000, UNKNOWN
PRAI US 1999-166751P 19991122 (60)
DT Utility
FS APPLICATION
LN.CNT 12006
INCL INCLM: 435/184.000
INCLS: 435/069.200; 435/325.000; 435/320.100; 536/023.200
NCL NCLM: 435/184.000
NCLS: 435/069.200; 435/325.000; 435/320.100; 536/023.200
IC [7]
ICM: C12N009-99
ICS: C07H021-04; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 31 OF 52 USPATFULL
AN 2002:157008 USPATFULL
TI Four disulfide core domain-containing (FDCD) polynucleotides, polypeptides, and antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
PI US 2002081607 A1 20020627
AI US 2001-874062 A1 20010606 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US32462, filed on 29 Nov 2000, UNKNOWN
PRAI US 1999-168229P 19991201 (60)
DT Utility
FS APPLICATION
LN.CNT 11572
INCL INCLM: 435/006.000
INCLS: 435/007.100; 435/069.100; 435/325.000; 536/023.500; 530/350.000
NCL NCLM: 435/006.000
NCLS: 435/007.100; 435/069.100; 435/325.000; 536/023.500; 530/350.000
IC [7]
ICM: C12Q001-68
ICS: G01N033-53; C07H021-04; C07K014-435; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 32 OF 52 USPATFULL
AN 2002:149306 USPATFULL
TI ADAM polynucleotides, polypeptides, and antibodies
IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002077465 A1 20020620
AI US 2001-945676 A1 20010905 (9)
RLI Continuation-in-part of Ser. No. WO 2001-US5497, filed on 22 Feb 2001,
UNKNOWN
PRAI US 2000-187937P 20000303 (60)
DT Utility
FS APPLICATION
LN.CNT 12287
INCL INCLM: 536/023.200
INCLS: 435/320.100; 435/325.000; 435/069.100; 435/183.000
NCL NCLM: 536/023.200
NCLS: 435/320.100; 435/325.000; 435/069.100; 435/183.000
IC [7]
ICM: C07H021-04
ICS: C12N009-00; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 33 OF 52 USPATFULL
AN 2002:149299 USPATFULL
TI Death domain-containing receptor polynucleotides, polypeptides, and
antibodies
IN Ni, Jian, Germantown, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002077458 A1 20020620
AI US 2001-835788 A1 20010417 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US28666, filed on 17 Oct 2000,
UNKNOWN
PRAI US 1999-159585P 19991018 (60)
US 1999-167246P 19991124 (60)
DT Utility
FS APPLICATION
LN.CNT 14143
INCL INCLM: 530/350.000
INCLS: 536/023.500; 435/320.100; 435/325.000; 435/069.100; 530/324.000;
530/387.900; 514/044.000; 435/006.000; 435/007.100; 514/002.000
NCL NCLM: 530/350.000
NCLS: 536/023.500; 435/320.100; 435/325.000; 435/069.100; 530/324.000;
530/387.900; 514/044.000; 435/006.000; 435/007.100; 514/002.000
IC [7]
ICM: A01N037-18
ICS: A61K038-00; C12Q001-68; G01N033-53; C07H021-04; A61K031-70;
A01N043-04; C12P021-06; C12N015-00; C12N015-09; C12N015-63; C12N015-70;
C12N015-74; C07K005-00; C07K007-00; C07K016-00; C07K017-00; C12N005-00;
C12N005-02; C07K001-00; C07K014-00; C12P021-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 34 OF 52 USPATFULL
AN 2002:149131 USPATFULL
TI 28 human secreted proteins
IN Ruben, Steven M., Olney, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Li, Yi, Sunnyvale, CA, UNITED STATES
Zeng, Zhizhen, Lansdale, PA, UNITED STATES
Kyaw, Hla, Frederick, MD, UNITED STATES
Fischer, Carrie L., Burke, VA, UNITED STATES
Li, Haodong, Gaithersburg, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Gentz, Reiner L., Rockville, MD, UNITED STATES
Wei, Ying-Fei, Berkeley, CA, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES

Greene, John M., Gaithersburg, MD, UNITED STATES
Ferrie, Ann M., Tewksbury, MA, UNITED STATES
PI US 2002077287 A1 20020620
AI US 2001-852659 A1 20010511 (9)
RLI Continuation-in-part of Ser. No. US 1998-152060, filed on 11 Sep 1998,
UNKNOWN
DT Utility
FS APPLICATION
LN.CNT 17779
INCL INCLM: 514/012.000
INCLS: 435/325.000; 435/320.100; 435/069.100; 435/183.000; 530/350.000;
536/023.200
NCL NCLM: 514/012.000
NCLS: 435/325.000; 435/320.100; 435/069.100; 435/183.000; 530/350.000;
536/023.200
IC [7]
ICM: A61K038-17
ICS: C07H021-04; C12N009-00; C12P021-02; C12N005-06; C07K014-435
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 35 OF 52 USPATFULL
AN 2002:148614 USPATFULL
TI 28 human secreted proteins
IN Ruben, Steven M., Olney, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Li, Yi, Sunnyvale, CA, UNITED STATES
Zeng, ZhiZhen, Lansdale, PA, UNITED STATES
Kyaw, Hla, Frederick, MD, UNITED STATES
Fischer, Carrie L., Burke, VA, UNITED STATES
Li, Haodong, Gaithersburg, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Gentz, Reiner L., Rockville, MD, UNITED STATES
Wei, Ying-Fei, Berkeley, CA, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Greene, John M., Gaithersburg, MD, UNITED STATES
Ferrie, Ann M., Painted Post, NY, UNITED STATES

PI US 2002076756 A1 20020620
AI US 2001-853161 A1 20010511 (9)
PRAI US 2001-265583P 20010202 (60)
DT Utility
FS APPLICATION
LN.CNT 17788
INCL INCLM: 435/069.100
INCLS: 435/325.000; 435/320.100; 530/350.000; 536/023.500
NCL NCLM: 435/069.100
NCLS: 435/325.000; 435/320.100; 530/350.000; 536/023.500
IC [7]
ICM: C12P021-02
ICS: C12N005-06; C07H021-04; C07K014-435
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 36 OF 52 USPATFULL
AN 2002:141609 USPATFULL
TI Transferrin polynucleotides, polypeptides, and antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
PI US 2002072596 A1 20020613
AI US 2001-891126 A1 20010626 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US34769, filed on 21 Dec 2000,
UNKNOWN
PRAI US 1999-171595P 19991223 (60)

DT Utility
FS APPLICATION
LN.CNT 12048
INCL INCLM: 536/023.500
INCLS: 530/350.000; 435/069.100; 435/325.000; 435/320.100
NCL NCLM: 536/023.500
NCLS: 530/350.000; 435/069.100; 435/325.000; 435/320.100
IC [7]
ICM: C07H021-04
ICS: C07K014-705; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 37 OF 52 USPATFULL
AN 2002:133469 USPATFULL
TI Serine protease polynucleotides, polypeptides, and antibodies
IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
PI US 2002068320 A1 20020606
AI US 2001-804156 A1 20010313 (9)
PRAI US 2000-189025P 20000314 (60)
DT Utility
FS APPLICATION
LN.CNT 13119
INCL INCLM: 435/069.100
INCLS: 435/226.000; 435/325.000; 435/006.000; 435/007.100; 530/388.100;
536/023.200
NCL NCLM: 435/069.100
NCLS: 435/226.000; 435/325.000; 435/006.000; 435/007.100; 530/388.100;
536/023.200
IC [7]
ICM: C12Q001-68
ICS: G01N033-53; C12P021-02; C12N005-06; C07H021-04; C12N009-64
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 38 OF 52 USPATFULL
AN 2002:126703 USPATFULL
TI Immunoglobulin superfamily polynucleotides, polypeptides, and antibodies
IN Young, Paul E., Gaithersburg, MD, UNITED STATES
Ni, Jain, Rockville, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
PI US 2002065220 A1 20020530
AI US 2001-799514 A1 20010307 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US23662, filed on 29 Aug 2000,
UNKNOWN
PRAI US 1999-152248P 19990903 (60)
DT Utility
FS APPLICATION
LN.CNT 12437
INCL INCLM: 514/012.000
INCLS: 536/023.100; 435/069.100; 435/325.000; 435/320.100
NCL NCLM: 514/012.000
NCLS: 536/023.100; 435/069.100; 435/325.000; 435/320.100
IC [7]
ICM: A61K038-17
ICS: C07H021-04; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 39 OF 52 USPATFULL
AN 2002:126332 USPATFULL
TI Human protein tyrosine phosphatase polynucleotides, polypeptides, and

antibodies
IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002064844 A1 20020530
AI US 2001-906779 A1 20010718 (9)
RLI Continuation-in-part of Ser. No. WO 2001-US1563, filed on 17 Jan 2001,
UNKNOWN
PRAI US 2000-176306P 20000118 (60)
DT Utility
FS APPLICATION
LN.CNT 12129
INCL INCLM: 435/183.000
INCLS: 435/006.000; 435/069.100; 435/325.000; 435/320.100; 536/023.200
NCL NCLM: 435/183.000
NCLS: 435/006.000; 435/069.100; 435/325.000; 435/320.100; 536/023.200
IC [7]
ICM: C12N009-00
ICS: C12Q001-68; C07H021-04; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 40 OF 52 USPATFULL
AN 2002:126314 USPATFULL
TI Cytokine receptor-like polynucleotides, polypeptides, and antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
PI US 2002064826 A1 20020530
AI US 2001-874069 A1 20010606 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US32525, filed on 30 Nov 2000,
UNKNOWN
PRAI US 1999-168621P 19991203 (60)
DT Utility
FS APPLICATION
LN.CNT 12089
INCL INCLM: 435/069.100
INCLS: 435/325.000; 435/320.100; 536/023.100
NCL NCLM: 435/069.100
NCLS: 435/325.000; 435/320.100; 536/023.100
IC [7]
ICM: C07H021-02
ICS: C07H021-04; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 41 OF 52 USPATFULL
AN 2002:126306 USPATFULL
TI 52 human secreted proteins
IN Ni, Jian, Germantown, MD, UNITED STATES
Baker, Kevin P., Darnestown, MD, UNITED STATES
Birse, Charles E., North Potomac, MD, UNITED STATES
Fiscella, Michele, Bethesda, MD, UNITED STATES
Komatsoulis, George A., Silver Spring, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Duan, D. Roxanne, Bethesda, MD, UNITED STATES
Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
LaFleur, David W., Washington, DC, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Wei, Ping, Brookeville, MD, UNITED STATES

Florence, Kimberly A., Rockville, MD, UNITED STATES
PI US 2002064818 A1 20020530
AI US 2001-789561 A1 20010222 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US24008, filed on 31 Aug 2000,
UNKNOWN
PRAI US 1999-152317P 19990903 (60)
US 1999-152315P 19990903 (60)
DT Utility
FS APPLICATION
LN.CNT 24623
INCL INCLM: 435/069.100
INCLS: 435/006.000; 435/007.100; 536/023.100; 435/325.000
NCL NCLM: 435/069.100
NCLS: 435/006.000; 435/007.100; 536/023.100; 435/325.000
IC [7]
ICM: C12P021-02
ICS: C12Q001-68; G01N033-53; C07H021-04; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 42 OF 52 USPATFULL
AN 2002:119846 USPATFULL
TI Human G-protein Chemokine receptor (CCR5) HDGMR10
IN Rosen, Craig A., Laytonsville, MD, UNITED STATES
Roschke, Viktor, Rockville, MD, UNITED STATES
Li, Yi, Sunnyvale, CA, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002061834 A1 20020523
AI US 2001-779880 A1 20010209 (9)
PRAI US 2000-181258P 20000209 (60)
US 2000-187999P 20000309 (60)
US 2000-234336P 20000922 (60)
DT Utility
FS APPLICATION
LN.CNT 18667
INCL INCLM: 514/001.000
INCLS: 530/350.000; 536/023.500; 435/325.000; 435/320.100; 435/069.100
NCL NCLM: 514/001.000
NCLS: 530/350.000; 536/023.500; 435/325.000; 435/320.100; 435/069.100
IC [7]
ICM: A61K031-00
ICS: C07H021-04; C07K014-705; C12N005-06; C12P021-02
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 43 OF 52 USPATFULL
AN 2002:105937 USPATFULL
TI Major intrinsic protein (MIP)-like polynucleotides, polypeptides, and
antibodies
IN Ruben, Steven A., Olney, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
PA Human Genome Sciences, Inc., Rockville, MD (U.S. corporation)
PI US 2002055142 A1 20020509
AI US 2001-862419 A1 20010523 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US31919, filed on 21 Nov 2000,
UNKNOWN
PRAI US 1999-167247P 19991124 (60)
DT Utility
FS APPLICATION
LN.CNT 11747
INCL INCLM: 435/069.100
INCLS: 536/023.500; 435/320.100; 435/325.000; 530/324.000; 530/387.900;
435/006.000; 435/007.200
NCL NCLM: 435/069.100

NCLS: 536/023.500; 435/320.100; 435/325.000; 530/324.000; 530/387.900;
435/006.000; 435/007.200

IC [7]

ICM: C12Q001-68

ICS: G01N033-53; G01N033-567; C07H021-04; C12P021-06; C12N015-00;
C12N015-09; C12N015-63; C12N015-70; C12N015-74; C07K005-00; C07K007-00;
C07K016-00; C07K017-00; A61K038-00; C12N005-00; C12N005-02; C12P021-08

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 44 OF 52 USPATFULL

AN 2002:99088 USPATFULL

TI Kringle domain-containing polynucleotides, polypeptides, and antibodies

IN Ni, Jian, Germantown, MD, UNITED STATES

Moore, Paul A., Germantown, MD, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002051984 A1 20020502

AI US 2001-848288 A1 20010504 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US30664, filed on 8 Nov 2000,
UNKNOWN

PRAI US 1999-164853P 19991112 (60)

DT Utility

FS APPLICATION

LN.CNT 12041

INCL INCLM: 435/006.000

INCLS: 536/023.100; 435/007.100; 435/069.100; 514/044.000; 514/012.000;
435/183.000; 530/350.000

NCL INCLM: 435/006.000

NCLS: 536/023.100; 435/007.100; 435/069.100; 514/044.000; 514/012.000;
435/183.000; 530/350.000

IC [7]

ICM: A61K048-00

ICS: C07K014-435; A61K038-17; C12P021-02; C12Q001-68; G01N033-53;
C12N009-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 45 OF 52 USPATFULL

AN 2002:92268 USPATFULL

TI Human G-protein Chemokine Receptor HDGNR10

IN Rosen, Craig A., Laytonsville, MD, UNITED STATES

Roschke, Viktor, Rockville, MD, UNITED STATES

Li, Yi, Sunnyvale, CA, UNITED STATES

Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002048786 A1 20020425

AI US 2001-779879 A1 20010209 (9)

PRAI US 2000-181258P 20000209 (60)

US 2000-187999P 20000309 (60)

US 2000-234336P 20000922 (60)

DT Utility

FS APPLICATION

LN.CNT 17969

INCL INCLM: 435/069.100

INCLS: 536/023.500; 424/130.100; 514/012.000; 435/007.200; 435/325.000

NCL INCLM: 435/069.100

NCLS: 536/023.500; 424/130.100; 514/012.000; 435/007.200; 435/325.000

IC [7]

ICM: G01N033-53

ICS: G01N033-567; A61K038-00; C07H021-04; C12P021-06; A61K039-395;
C12N005-02; C12N005-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 46 OF 52 USPATFULL

AN 2002:88529 USPATFULL

TI Metformin-containing compositions for the treatment of **diabetes**
IN Fine, Stuart A., Northbrook, IL, United States
Kinsella, Kevin J., La Jolla, CA, United States
PA Akesis Pharmaceuticals, Inc., La Jolla, CA, United States (U.S.
corporation)
PI US 6376549 B1 20020423
AI US 1998-156102 19980917 (9)
DT Utility
FS GRANTED
LN.CNT 1429
INCL INCLM: 514/635.000
INCLS: 424/617.000; 424/626.000; 424/639.000; 424/655.000
NCL NCLM: 514/635.000
NCLS: 424/617.000; 424/626.000; 424/639.000; 424/655.000
IC [7]
ICM: A61K031-55
ICS: A61K033-24; A61K033-22; A01N059-22
EXF 424/646; 424/655; 424/682; 514/25; 514/162; 514/249; 514/255; 514/315;
514/331; 514/439; 514/440; 514/458; 514/592; 514/593; 514/635; 514/866
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 47 OF 52 USPATFULL
AN 2002:78715 USPATFULL
TI Stanniocalcin polynucleotides, polypeptides, and methods based thereon
IN Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
Zhang, Ke-Zhou, Brussels, BELGIUM
Lindsberg, Perttu, Helsinki, FINLAND
Tatlisumak, Turgut, Helsinki, FINLAND
Kaste, Markku, Vantaa, FINLAND
Andersson, Leif C., Helsinki, FINLAND
PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S.
corporation)
PI US 2002042372 A1 20020411
AI US 2001-840989 A1 20010425 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US29432, filed on 26 Oct 2000,
UNKNOWN
PRAI US 1999-161740P 19991027 (60)
DT Utility
FS APPLICATION
LN.CNT 9559
INCL INCLM: 514/012.000
INCLS: 424/145.100; 530/388.240
NCL NCLM: 514/012.000
NCLS: 424/145.100; 530/388.240
IC [7]
ICM: A61K038-22
ICS: A61K039-395; C07K016-26
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 48 OF 52 USPATFULL
AN 2002:66870 USPATFULL
TI IL-6-like polynucleotides, polypeptides, and antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
PI US 2002037523 A1 20020328
AI US 2001-875016 A1 20010607 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US33134, filed on 7 Dec 2000,
UNKNOWN
PRAI US 1999-169838P 19991209 (60)
DT Utility
FS APPLICATION
LN.CNT 11587

INCL INCLM: 435/006.000
INCLS: 536/023.500; 435/007.100; 435/069.520; 435/320.100; 435/325.000;
530/351.000; 424/085.200
NCL NCLM: 435/006.000
NCLS: 536/023.500; 435/007.100; 435/069.520; 435/320.100; 435/325.000;
530/351.000; 424/085.200
IC [7]
ICM: C12Q001-68
ICS: G01N033-53; C07H021-04; C12P021-04; A61K038-20; C12N005-06;
C07K014-54
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 49 OF 52 USPATFULL
AN 2002:12261 USPATFULL
TI Uteroglobin-like polynucleotides, polypeptides, and antibodies
IN Ni, Jian, Germantown, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002006640 A1 20020117
AI US 2001-846258 A1 20010502 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US30326, filed on 3 Nov 2000,
UNKNOWN
PRAI US 1999-163395P 19991104 (60)
DT Utility
FS APPLICATION
LN.CNT 12076
INCL INCLM: 435/069.100
INCLS: 435/325.000; 435/006.000; 435/007.100; 514/044.000; 530/350.000;
536/023.500
NCL NCLM: 435/069.100
NCLS: 435/325.000; 435/006.000; 435/007.100; 514/044.000; 530/350.000;
536/023.500
IC [7]
ICM: C12P021-02
ICS: C12N005-06; A61K048-00; C07K014-72; C12Q001-68; G01N033-53;
C07H021-04
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 50 OF 52 USPATFULL
AN 2002:8489 USPATFULL
TI Retinoid receptor interacting polynucleotides, polypeptides, and
antibodies
IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002004489 A1 20020110
AI US 2001-788600 A1 20010221 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US22351, filed on 15 Aug 2000,
UNKNOWN
PRAI US 1999-148757P 19990816 (60)
US 2000-189026P 20000314 (60)
DT Utility
FS APPLICATION
LN.CNT 11257
INCL INCLM: 514/044.000
INCLS: 536/023.500; 530/350.000; 435/069.100; 435/325.000; 530/388.220
NCL NCLM: 514/044.000
NCLS: 536/023.500; 530/350.000; 435/069.100; 435/325.000; 530/388.220
IC [7]
ICM: A61K048-00
ICS: C07H021-04; C12P021-02; C12N005-06; C07K014-705; C07K016-28
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 51 OF 52 USPATFULL

AN 2001:40034 USPATFULL
TI Dietary supplement and method of treatment for diabetic control
IN Fine, Stuart A., Northbrook, IL, United States
PA Akesis Pharmaceuticals, Inc., San Diego, CA, United States (U.S. corporation)
PI US 6203819 B1 20010320
AI US 1999-272819 19990319 (9)
RLI Continuation of Ser. No. US 1997-964814, filed on 5 Nov 1997
PRAI US 1997-39958P 19970307 (60)
DT Utility
FS Granted
LN.CNT 1275
INCL INCLM: 424/646.000
INCLS: 424/655.000; 424/681.000; 424/682.000; 514/165.000; 514/458.000
NCL NCLM: 424/646.000
NCLS: 424/655.000; 424/681.000; 424/682.000; 514/165.000; 514/458.000
IC [7]
ICM: A61K033-26
ICS: A61K033-24; A61K033-14; A61K031-60; A61K031-355
EXF 424/646; 424/655; 424/681; 424/682; 514/165; 514/458
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 52 OF 52 USPATFULL
AN 1999:120934 USPATFULL
TI Dietary supplement and method of treatment for diabetic control
IN Fine, Stuart A., Northbrook, IL, United States
PA Akesis Pharmaceuticals, Inc., La Jolla, CA, United States (U.S. corporation)
PI US 5962030 19991005
AI US 1997-964814 19971105 (8)
PRAI US 1997-39958P 19970307 (60)
DT Utility
FS Granted
LN.CNT 1156
INCL INCLM: 424/646.000
INCLS: 424/655.000; 424/681.000; 424/682.000; 514/165.000
NCL NCLM: 424/646.000
NCLS: 424/655.000; 424/681.000; 424/682.000; 514/165.000
IC [6]
ICM: A61K033-26
ICS: A61K033-24; A61K033-14; A61K033-06; A61K031-60
EXF 424/646; 424/655; 424/681; 424/682; 514/165
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>

=> d 12 44-54 kwic, bib

L2 ANSWER 44 OF 52 USPATFULL
SUMM . . . and increases clearance due to the aggregate's immunogenic activity. (Pinckard et al., Clin. Exp. Immunol. 2:331-340 (1967); Robbins et al., **Diabetes** 36: 838-845 (1987); Cleland et al., Crit. Rev. Therapeutic Drug Carrier Systems 10:307-377 (1993)).
SUMM . . . thrombocytopenia, idiopathic thrombocytopenia purpura, purpura (e.g., Henloch-Scoenlein purpura), autoimmune cytopenia, Goodpasture's syndrome, 5Pempfigus vulgaris, myasthenia gravis, Grave's disease (hyperthyroidism), and insulin-resistant **diabetes** mellitus.
SUMM . . . polychondritis, rheumatic heart disease, neuritis, uveitis ophthalmia, polyendocrinopathies, Reiter's Disease, Stiff-Man Syndrome, autoimmune pulmonary inflammation, autism, Guillain-Barre Syndrome, insulin dependent **diabetes** mellitus, and autoimmune inflammatory eye disorders.

SUMM . . . and complement in basement membrane), Sjogren's syndrome (often characterized, e.g., by multiple tissue antibodies, and/or a specific nonhistone ANA (SS-B)), **diabetes** mellitus (often characterized, e.g., by cell-mediated and humoral islet cell antibodies), and adrenergic drug resistance (including adrenergic drug resistance with. . .

SUMM . . . characterized by inflammation (e.g., hepatitis, rheumatoid arthritis, gout, trauma, pancreatitis, sarcoidosis, dermatitis, renal ischemia-reperfusion injury, Grave's disease, systemic lupus erythematosus, **diabetes** mellitus, and allogenic transplant rejection).

SUMM . . . autoimmune and chronic inflammatory and infective diseases. Examples of autoimmune diseases are described herein and include multiple sclerosis, and insulin-dependent **diabetes**.

SUMM . . . hypochromic anemia, microcytic anemia, chlorosis, hereditary sideroblastic anemia, idiopathic acquired sideroblastic anemia, red cell aplasia, megaloblastic anemia (e.g., pernicious anemia, (**vitamin** B12 deficiency) and folic acid deficiency anemia), aplastic anemia, hemolytic anemias (e.g., autoimmune hemolytic anemia, microangiopathic hemolytic anemia, and paroxysmal. . .

SUMM . . . are not limited to, infantile genetic agranulocytosis, familial neutropenia, cyclic neutropenia, neutropenias resulting from or associated with dietary deficiencies (e.g., **vitamin** B 12 deficiency or folic acid deficiency), neutropenias resulting from or associated with drug treatments (e.g., antibiotic regimens such as. . .

SUMM . . . treat metabolic and congenital disorders of the kidney (e.g., uremia, renal amyloidosis, renal osteodystrophy, renal tubular acidosis, renal glycosuria, nephrogenic **diabetes** insipidus, cystinuria, Fanconi's syndrome, renal fibrocystic osteosis (renal rickets), Hartnup disease, Bartter's syndrome, Liddle's syndrome, polycystic kidney disease, medullary cystic disease, medullary sponge kidney, Alport's syndrome, nail-patella syndrome, congenital nephrotic syndrome, CRUSH syndrome, horseshoe kidney, diabetic nephropathy, nephrogenic **diabetes** insipidus, analgesic nephropathy, kidney stones, and membranous nephropathy), and autoimmune disorders of the kidney (e.g., systemic lupus erythematosus (SLE), Goodpasture. . .

SUMM . . . such as, for example, ammonium metavanadate, sodium metavanadate, and sodium orthovanadate. Suitable vanadyl complexes include, for example, vanadyl acetylacetonate and **vanadyl sulfate** including **vanadyl sulfate** hydrates such as **vanadyl sulfate** mono- and trihydrates.

SUMM . . . venous stasis ulcers, burns resulting from heat exposure or chemicals, and other abnormal wound healing conditions such as uremia, malnutrition, **vitamin** deficiencies and complications associated with systemic treatment with steroids, radiation therapy and antineoplastic drugs and antimetabolites. Polynucleotides or polypeptides, as. . .

SUMM . . . polypeptides, as well as agonists or antagonists of the present invention, could be used treat or prevent the onset of **diabetes** mellitus. In patients with newly diagnosed Types I and II **diabetes**, where some islet cell function remains, polynucleotides or polypeptides, as well as agonists or antagonists of the present invention, could. . .

SUMM . . . the nervous system is destroyed or injured by a nutritional disorder or disorder of metabolism including, but not limited to, **vitamin** B 12 deficiency, folic acid deficiency, Wernicke disease, tobacco- alcohol amblyopia, Marchiafava-Bignami disease (primary degeneration of the corpus callosum), and alcoholic cerebellar degeneration; (7) neurological lesions associated with systemic diseases including, but not limited to, **diabetes** (diabetic neuropathy, Bell's palsy), systemic lupus erythematosus, carcinoma, or sarcoidosis;

(8) lesions caused by toxic substances including alcohol, lead, or. .

SUMM [0650] Endocrine system and/or hormone imbalance disorders and/or diseases include disorders and/or diseases of the pancreas, such as, for example, **diabetes** mellitus, **diabetes** insipidus, congenital pancreatic agenesis, pheochromocytoma--islet cell tumor syndrome; disorders and/or diseases of the adrenal glands such as, for example, Addison's. . .

SUMM . . . to this gene and/or agonists and/or antagonists thereof may be used to diagnose, prognose, treat, prevent, and/or ameliorate type I **diabetes** mellitus (insulin dependent **diabetes** mellitus, IDDM).

SUMM . . . to this gene and/or agonists and/or antagonists thereof may be used to diagnose, prognose, treat, prevent, and/or ameliorate type II **diabetes** mellitus (insulin resistant **diabetes** mellitus).

SUMM . . . antagonistic antibodies) may be used to diagnose, prognoses treat, prevent, or ameliorate conditions associated with (type I or type II) **diabetes** mellitus, including, but not limited to, diabetic ketoacidosis, diabetic coma, nonketotic hyperglycemic-hyperosmolar coma, seizures, mental confusion, drowsiness, cardiovascular disease (e.g., .

SUMM [0665] Other disorders and/or diseases of the male reproductive system include, for example, Klinefelter's syndrome, Young's syndrome, premature ejaculation, **diabetes** mellitus, cystic fibrosis, Kartagener's syndrome, high fever, multiple sclerosis, and gynecomastia.

SUMM . . . abortion, complete abortion, habitual abortion, missed abortion, and septic abortion; ectopic pregnancy, anemia, Rh incompatibility, vaginal bleeding during pregnancy, gestational **diabetes**, intrauterine growth retardation, polyhydramnios, HELLP syndrome, abruptio placentae, placenta previa, hyperemesis, preeclampsia, eclampsia, herpes gestationis, and urticaria of pregnancy. Additionally, . . . high blood pressure, anemia, kidney disease, infectious disease (e.g., rubella, cytomegalovirus, toxoplasmosis, infectious hepatitis, chlamydia, HIV, AIDS, and genital herpes), **diabetes** mellitus, Graves' disease, thyroiditis, hypothyroidism, Hashimoto's thyroiditis, chronic active hepatitis, cirrhosis of the liver, primary biliary cirrhosis, asthma, systemic lupus. . .

DETD . . . such as, for example, ammonium metavanadate, sodium metavanadate, and sodium orthovanadate. Suitable vanadyl complexes include, for example, vanadyl acetylacetonate and **vanadyl sulfate** including **vanadyl sulfate** hydrates such as **vanadyl sulfate** mono- and trihydrates.

DETD . . . administered in combination with one or more of the following: a biguanide antidiabetic agent, a glitazone antidiabetic agent, and a **sulfonylurea** antidiabetic agent.

DETD . . . fumarate (e.g., FEOSTAT.TM.), ferrous gluconate (e.g., FERGON.TM.), polysaccharide-iron complex (e.g., NIFEREX.TM.), iron dextran injection (e.g., INFED.TM.), cupric sulfate, pyroxidine, riboflavin, **Vitamin B.sub.12**, cyanocobalamin injection (e.g., REDISOL.TM., RUBRAMIN PC.TM.), hydroxocobalamin, folic acid (e.g., FOLVITE.TM.), leucovorin (folinic acid, 5-CHOH4PteGlu, citrovorum factor) or WELLCOVORIN. . .

AN 2002:99088 USPATFULL

TI Kringle domain-containing polynucleotides, polypeptides, and antibodies

IN Ni, Jian, Germantown, MD, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002051984 A1 20020502

AI US 2001-848288 A1 20010504 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US30664, filed on 8 Nov 2000, UNKNOWN

PRAI US 1999-164853P 19991112 (60)
DT Utility
FS APPLICATION
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 12041
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 45 OF 52 USPATFULL

- DETD . . . and increases clearance due to the aggregate's immunogenic activity. (Pinckard et al., Clin. Exp. Immunol. 2:331-340 (1967); Robbins et al., **Diabetes** 36: 838-845 (1987); Cleland et al., Crit. Rev. Therapeutic Drug Carrier Systems 10:307-377 (1993).)
- DETD . . . Pemphigoid, Pemphigus, Polyendocrinopathies, Purpura, Reiter's Disease, Stiff-Man Syndrome, Autoimmune Thyroiditis, Systemic Lupus Erythematosus, Autoimmune Pulmonary Inflammation, Guillain-Barre Syndrome, insulin dependent **diabetes** mellitus, and autoimmune inflammatory eye disease.
- DETD . . . characterized by inflammation (e.g., hepatitis, rheumatoid arthritis, gout, trauma, pancreatitis, sarcoidosis, dermatitis, renal ischemia-reperfusion injury, Grave's disease, systemic lupus erythematosus, **diabetes** mellitus, and allogenic transplant rejection).
- DETD . . . are not limited to, infantile genetic agranulocytosis, familial neutropenia, cyclic neutropenia, neutropenias resulting from or associated with dietary deficiencies (e.g., **vitamin B12** deficiency or folic acid deficiency), neutropenias resulting from or associated with drug treatments (e.g., antibiotic regimens such as . . .
- DETD . . . autoimmune and chronic inflammatory and infective diseases. Examples of autoimmune diseases are described herein and include multiple sclerosis, and insulin-dependent **diabetes**.
- DETD . . . the nervous system is destroyed or injured by a nutritional disorder or disorder of metabolism including but not limited to, **vitamin B12** deficiency, folic acid deficiency, Wernicke disease, tobacco-alcohol amblyopia, Marchiafava-Bignami disease (primary degeneration of the corpus callosum), and alcoholic cerebellar degeneration; (7) neurological lesions associated with systemic diseases including, but not limited to, **diabetes** (diabetic neuropathy, Bell's palsy), systemic lupus erythematosus, carcinoma, or sarcoidosis; (8) lesions caused by toxic substances including alcohol, lead, or. . .
- DETD . . . to this gene and/or agonists and/or antagonists thereof may be used to diagnose, prognose, treat, prevent, and/or ameliorate type I **diabetes** mellitus (insulin dependent **diabetes** mellitus, IDDM).
- DETD . . . to this gene and/or agonists and/or antagonists thereof may be used to diagnose, prognose, treat, prevent, and/or ameliorate type II **diabetes** mellitus (insulin resistant **diabetes** mellitus).
- DETD . . . antagonistic antibodies) may be used to diagnose, prognose, treat, prevent, and/or ameliorate conditions associated with (type I or type II) **diabetes** mellitus, including, but not limited to, diabetic ketoacidosis, diabetic coma, nonketotic hyperglycemic-hyperosmolar coma, seizures, mental confusion, drowsiness, cardiovascular disease (e.g., . . .
- DETD . . . such as, for example, ammonium metavanadate, sodium metavanadate, and sodium orthovanadate. Suitable vanadyl complexes include, for example, vanadyl acetylacetonate and **vanadyl sulfate** including **vanadyl sulfate** hydrates

such as **vanadyl sulfate** mono- and trihydrates.

DETD . . . mg/L of Pyridoxine HCL; 0.319 mg/L of Riboflavin; 3.17 mg/L of Thiamine HCL; 0.365 mg/L of Thymidine; 0.680 mg/L of **Vitamin B.sub.12**; 25 mM of HEPES Buffer; 2.39 mg/L of Na Hypoxanthine; 0.105 mg/L of Lipoic Acid; 0.081 mg/L of Sodium. . .

DETD . . . administered in combination with one or more of the following: a biguanide antidiabetic agent, a glitazone antidiabetic agent, and a **sulfonylurea** antidiabetic agent.

DETD [1366] The diabetic animals have many of the characteristic features observed in Type II **diabetes** mellitus. Homozygous (db+/db+) mice are obese in comparison to their normal heterozygous (db+/+m) littermates. Mutant diabetic (db+/db+) mice have a . . . glomerular filtration abnormalities have been described in these animals (Norido, F. et al., Exp. Neurol. 83(2):221-232 (1984); Robertson et al., **Diabetes** 29(1):60-67 (1980); Giacomelli et al. Lab Invest. 40(4):460-473 (1979); Coleman, D. L., **Diabetes** 31 (Suppl):1-6 (1982)). These homozygous diabetic mice develop hyperglycemia that is resistant to insulin analogous to human type II **diabetes** (Mandel et al., J. Immunol. 120:1375-1377 (1978)).

DETD . . . characteristics observed in these animals suggests that healing in this model may be similar to the healing observed in human **diabetes** (Greenhalgh, et al., Am. J. of Pathol. 136:1235-1246 (1990)).

DETD . . . (CCR5) is administered to db+/db+ mice parenterally for various periods of time either before or after the mice have developed **diabetes**, and blood glucose, and/or insulin levels, or other art-known methods for measuring disease severity, are measured to determine whether administration prevents, slows, or lessens the onset or severity of **diabetes**.

AN 2002:92268 USPATFULL

TI Human G-protein Chemokine Receptor HDGMR10

IN Rosen, Craig A., Laytonville, MD, UNITED STATES
 Roschke, Viktor, Rockville, MD, UNITED STATES
 Li, Yi, Sunnyvale, CA, UNITED STATES
 Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002048786 A1 20020425

AI US 2001-779879 A1 20010209 (9)

PRAI US 2000-181258P 20000209 (60)
 US 2000-187999P 20000309 (60)
 US 2000-234336P 20000922 (60)

DT Utility

FS APPLICATION

LREP STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934

CLMN Number of Claims: 61

ECL Exemplary Claim: 1

DRWN 4 Drawing Page(s)

LN.CNT 17969

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 46 OF 52 USPATFULL

TI Metformin-containing compositions for the treatment of **diabetes**

AB Compositions and methods using same for the treatment of **diabetes** its sequelae and pre-diabetic conditions are provided. Invention compositions include the anti-diabetic agent metformin, and bioavailable sources of one or . . .

SUMM . . . conditions. Particularly, this invention relates to metformin-containing pharmaceutical compositions and to methods of using the same for the treatment of **diabetes** and a number of symptoms which precede and/or accompany **diabetes**.

SUMM **Diabetes** mellitus is a mammalian condition in which the amount of glucose in the blood plasma is abnormally high. Elevated glucose. .

. condition can be life-threatening and high glucose levels in the blood plasma (hyperglycemia) can lead to a number of chronic **diabetes** syndromes, for example, atherosclerosis, microangiopathy, kidney disorders or failure, cardiac disease, diabetic retinopathy and other ocular disorders, including blindness.

SUMM **Diabetes** mellitus is known to affect at least 10 million Americans, and millions more may unknowingly have the disease. There are two forms of the disease. In the form of this disease known as Type II, non-insulin dependent **diabetes** (NIDDM) or adult-onset (as opposed to juvenile **diabetes** or Type I), the pancreas often continues to secrete normal amounts of insulin. However, this insulin is ineffective in preventing the symptoms of **diabetes** which include cardiovascular risk factors such as hyperglycemia, impaired carbohydrate (particularly glucose) metabolism, glycosuria, decreased insulin sensitivity, centralized obesity hypertriglyceridemia,. . . various cardiovascular effects attending these risk factors. Many of these cardiovascular risk factors are known to precede the onset of **diabetes** by as much as a decade. These symptoms, if left untreated, often lead to severe complications, including premature atherosclerosis, retinopathy,. . .

SUMM Current drugs used for managing Type II **diabetes** and its precursor syndromes, such as insulin resistance, fall within five classes of compounds: the biguanides, thiazolidinediones, the **sulfonylureas**, benzoic acid derivatives and .alpha.-glucosidase inhibitors. The biguanides, e.g., metformin, are believed to prevent excessive hepatic gluconeogenesis. The thiazolidinediones are believed to act by increasing the rate of peripheral glucose disposal. The **sulfonylureas**, e.g., tolbutamide and glyburide, the benzoic acid derivatives, e.g. repaglinide, and the .alpha.-glucosidase inhibitors, e.g. acarbose, lower plasma glucose primarily. . .

SUMM Unlike **sulfonylureas**, metformin does not produce hypoglycemia in either diabetic or non-diabetic subjects. With metformin therapy, insulin secretion remains unchanged while fasting. . .

SUMM Currently, there is no composition for the treatment of **diabetes**, its precursor syndromes and related sequelae that combines metformin with bioavailable elemental nutritional supplements such as vanadium, magnesium and chromium as well as other non-elemental nutritional palliatives which are effective in managing **diabetes**, its precursors, and sequelae.

SUMM . . . more nutritional supplements in an amount sufficient to produce a desirable effect, such as bioavailable sources of vanadium, chromium, magnesium, **vitamin E**, lipoic acid, folate and the like. Additionally, compositions of the present invention may contain aspirin. The present invention improves upon current regimens for treating **diabetes** with metformin, by exploiting the insulin-like effects of vanadium and chromium and also by providing a source of magnesium, which is so often deficient in people with **diabetes**. Also provided are methods for the treatment of **diabetes** and conditions attending or commonly preceding **diabetes**, comprising administration of an effective amount of the aforementioned compositions.

SUMM . . . to the aforementioned components, an effective amount of one or more additional anti-diabetic agents such as insulin, a thiazolidinedione, a **sulfonylurea**, a benzoic acid derivative, an .alpha.-glucosidase inhibitor, exendin-4, or the like. As will be appreciated by those skilled in the. . .

SUMM . . . in the practice of the present invention. Generally, a fixed dosage regimen is individualized for the management of hyperglycemia in **diabetes** mellitus with metformin HCl or any other pharmacologic agent. Individualization of dosage is made on the basis of both effectiveness. . .

SUMM As readily recognized by those of skill in the art, a variety of

sulfonylureas are useful for the treatment of **diabetes**

. Exemplary **sulfonylureas** contemplated for use in the practice of the present invention (with typical daily dosages indicated in parentheses) include acetohexamide (in. . . .

SUMM readily recognized by those of skill in the art, a variety of alpha-glucosidase inhibitors are useful for the treatment of **diabetes**. Exemplary alpha-glucosidase inhibitors contemplated for use in the practice of the present invention include acarbose, miglitol, and the like. Effective. . . .

SUMM recognized by those of skill in the art, a variety of benzoic acid derivatives are useful for the treatment of **diabetes**. Exemplary benzoic acid derivatives contemplated for use in the practice of the present invention include repaglinide (effective daily dosage in.

SUMM forms of nutritional supplements such as chromium, vanadium, and magnesium are able to alleviate one or more symptomologies associated with **diabetes** or which indicate a predisposition to **diabetes**. As will be understood by those skilled in the art, "bioavailable," as used herein, conotes that a particular element or. . . .

SUMM Bioavailable sources of vanadium, such as **vanadyl sulfate**, and of chromium, such as chromium picolinate, have properties that closely mimic, as well as enhance, many of the physiological. . . . cells to insulin, and lowers blood lipid and cholesterol levels. By their ability to potentiate the effects of insulin, both **vanadyl sulfate** and chromium have been found to enhance the entry of glucose (for energy) and amino acids (for protein synthesis) into. . . .

SUMM used to alleviate diabetic and pre-diabetic symptomology, with the vanadyl form being better tolerated physiologically. Bioavailable sources of vanadium include **vanadyl sulfate**, as well as other bioavailable forms of vanadium known in the art or developed in the future, particularly forms of. . . . thus forming a membrane permeable complex that is more permeable than vanadium alone. In one embodiment of the present invention, **vanadyl sulfate** is present in the range of about 50 mg up to about 7500 mg, per daily dose. In another embodiment of the present invention, **vanadyl sulfate** is present in the range of about 75 mg up to about 5000 mg, per daily dose. In another embodiment of the present invention, **vanadyl sulfate** is present in the range of about 20 mg up to about 100 mg, per daily dose.

SUMM of the present invention further optionally comprises, one or more of aspirin or willow bark extracts, a bioavailable source of **vitamin E**, a bioavailable source of lipoic acid and/or a bioavailable source of folic acid.

SUMM **Vitamin E** improves the action of insulin, glucose metabolism and lipid levels. People with **diabetes** have been shown to have reduced plasma **vitamin E** concentrations. As many as 60% of the newly diagnosed diabetic patients also have clinically obvious cardiovascular disease which may be alleviated by the ability of **vitamin E** to reduce arteriosclerosis. Although the exact mechanism by which **vitamin E** exerts its effects on insulin use, is unknown, it is postulated that the effects are the result of the well known antioxidant properties of **vitamin E** inasmuch as administration of **vitamin E** has been shown to reduce oxidative stress. Daily oral supplements of **vitamin E** has been shown to result in strong increase in total glucose disposal and in non-oxidative glucose metabolism in people with **diabetes**.

SUMM Therefor, in accordance with another aspect of the present invention, **vitamin E** (free 2R, 4'R, 8'R-alpha tocopherol) may be optionally included in invention compositions in a wide range of concentrations. Any. . . . acceptable amount can be employed in the practice of the

present invention. In one embodiment of the present invention, when **vitamin E** is included in invention compositions, **vitamin E** is present in the range of about 100 up to about 800 I.U. per daily dose. In a preferred embodiment, about 400 I.U. of **vitamin E** is contained per daily dose.

SUMM In addition to **vitamin E**, alpha lipoic acid is one of the most powerful antioxidants and is a coenzyme required to breakdown sugars, such. . . .

SUMM In accordance with another aspect of the present invention, there are provided methods for the treatment of a subject having **diabetes mellitus**, said method comprising administering to said subject an effective amount of a composition comprising metformin and one or more.

SUMM In accordance with another embodiment of the present invention there are provided methods for the treatment of a subject having **diabetes mellitus**, said method comprising administering to said subject an effective amount of a composition comprising metformin and one or more.

SUMM As will be appreciated by those of skill in the art, **diabetes** presents a complicated array of conditions and symptoms including abnormal glucose metabolism, insulin resistance, hyperinsulinemia, hyperglycemia, hypertriglyceridemia, elevated LDL, lowered. . . .

SUMM In addition, there are a number of precursor conditions which portend the development of **diabetes** and which can be treated by administration of invention compositions as described herein. Therefor, in accordance with another aspect of. . . .

SUMM of the present invention there are provided methods for reducing the dosage of anti-diabetic medication such as a thiazolidinedione, a **sulfonylurea**, an .alpha.-glucosidase inhibitor or a benzoic acid derivative, said method comprising administering to said subject an effective amount of a. . . .

SUMM another aspect of the present invention, there is provided an improvement over methods for the treatment of a subject having **diabetes** by administering to said subject an effective amount of insulin, the improvement comprising administering to said subject an insulin need. . . .

DETD Effect of Administration of Invention Composition to Patient with **Diabetes**

DETD To test the efficacy of invention compositions, a supplement (detailed below) was administered daily to a female with type II **diabetes** who was experiencing poor blood sugar control while taking metformin 500 mg b.i.d.

DETD

Chromium 333 .mu.g (in the form of 1 mg Cr-picolinate)

Magnesium 46 mg (in the form of 384 mg MgCl)

Vanadyl-sulfate hydrate 100 mg

Vitamin E 400 I.U.

Folate 400 .mu.g

DETD Effect of Administration of Invention Composition to Patient with **Diabetes**

DETD efficacy of invention compositions, a supplement (detailed below) was administered daily to a 27 year old female with type II **diabetes** who was experiencing poor blood sugar control while taking metformin 1000 mg b.i.d.

DETD

Chromium 333 .mu.g (in the form of 1 mg Cr-picolinate)

Magnesium 46 mg (in the form of 384 mg MgCl)

Vanadyl-sulfate hydrate 100 mg

Vitamin E 400 I.U.

Folate 400 .mu.g

CLM

What is claimed is:

1. A composition for the treatment of **diabetes**, said composition comprising metformin; one or more of a bioavailable source of magnesium and pharmaceutically acceptable salts thereof; one or . . thereof; and one or more of a bioavailable source of vanadium and pharmaceutically acceptable salts thereof; which components synergistically treat **diabetes**.
3. A composition according to claim 1, wherein said bioavailable source of vanadium is **vanadyl sulfate**.
5. A composition according to claim 1, further comprising one or more of aspirin, a bioavailable source of **vitamin E**, a bioavailable source of .alpha.-lipoic acid or a bioavailable source of folic acid.
9. A composition according to claim 3, wherein the amount of **vanadyl sulfate** is in the range of about 20 mg up to about 100 mg, per dose.
14. A composition according to claim 5, wherein the amount of **vitamin E** is in the range of about 400 up to about 800 I.U. per dose.
19. A composition according to claim 18, wherein said anti-diabetic agent is insulin, a thiazolidinedione, a **sulfonylurea**, an .alpha.-glucosidase inhibitor or a benzoic acid derivative.
20. A composition according to claim 19, wherein said **sulfonylurea** is acetohexamide, chlorpropamide, tolazimide, tolbutamide, glycazide, glipizide, glyburide, or glimeperide.
25. A method for the treatment of **diabetes** mellitus in a subject having **diabetes** mellitus, said method comprising administering to said subject an effective amount of a composition comprising metformin; one or more of . . . thereof; and one or more of a bioavailable source of vanadium and pharmaceutically acceptable salts thereof; which components synergistically treat **diabetes** mellitus.
36. A method according to claim 35, wherein said anti-diabetic medication is one or more of insulin, a thiazolidinedione, a **sulfonylurea**, an .alpha.-glucosidase inhibitor or a benzoic acid derivative.
38. In a method for the treatment of **diabetes** in a subject having **diabetes** by administering to said subject an effective amount of insulin, the improvement comprising administering to said subject an insulin need. . . .

AN 2002:88529 USPATFULL|

TI Metformin-containing compositions for the treatment of **diabetes**
|

IN Fine, Stuart A., Northbrook, IL, United States

Kinsella, Kevin J., La Jolla, CA, United States

PA Akesis Pharmaceuticals, Inc., La Jolla, CA, United States (U.S.
corporation)

PI US 6376549 B1 20020423

AI US 1998-156102 19980917 (9)

DT Utility|

FS GRANTED|

EXNAM Primary Examiner: Criares, Theodore J.|

LREP Foley, Hoag & Eliot LLP|

CLMN Number of Claims: 40|

ECL Exemplary Claim: 1|
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)|
LN.CNT 1429|
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 47 OF 52 USPATFULL

DETD . . . and increases clearance due to the aggregate's immunogenic activity. (Pinckard et al., Clin. Exp. Immunol. 2:331-340 (1967); Robbins et al., **Diabetes** 36: 838-845 (1987); Cleland et al., Crit. Rev. Therapeutic Drug Carrier Systems 10:307-377 (1993)).

DETD . . . the nervous system is destroyed or injured by a nutritional disorder or disorder of metabolism including, but not limited to, **vitamin B12** deficiency, folic acid deficiency, Wernicke disease, tobacco-alcohol amblyopia, Marchiafava-Bignami disease (primary degeneration of the corpus callosum), and alcoholic cerebellar degeneration; (7) neurological lesions associated with systemic diseases including, but not limited to, **diabetes** (diabetic neuropathy, Bell's palsy), systemic lupus erythematosus, carcinoma, or sarcoidosis; (8) lesions caused by toxic substances including alcohol, lead, or. .

DETD . . . Pemphigoid, Pemphigus, Polyendocrinopathies, Purpura, Reiter's Disease, Stiff-Man Syndrome, Autoimmune Thyroiditis, Systemic Lupus Erythematosus, Autoimmune Pulmonary Inflammation, Guillain-Barre Syndrome, insulin dependent **diabetes** mellitis, and autoimmune inflammatory eye disease.

DETD . . . venous stasis ulcers, burns resulting from heat exposure or chemicals, and other abnormal wound healing conditions such as uremia, malnutrition, **vitamin** deficiencies and complications associated with systemic treatment with steroids, radiation therapy and antineoplastic drugs and antimetabolites. stanniocalcin polynucleotides or polypeptides, . . .

DETD . . . polynucleotides or polypeptides, as well as agonists or antagonists of stanniocalcin, could be used treat or prevent the onset of **diabetes** mellitus. In patients with newly diagnosed Types I and II **diabetes**, where some islet cell function remains, stanniocalcin polynucleotides or polypeptides, as well as agonists or antagonists of stanniocalcin, could be. . .

DETD . . . such as, for example, ammonium metavanadate, sodium metavanadate, and sodium orthovanadate. Suitable vanadyl complexes include, for example, vanadyl acetylacetonate and **vanadyl sulfate** including **vanadyl sulfate** hydrates such as **vanadyl sulfate** mono- and trihydrates.

DETD . . . administered in combination with one or more of the following: a biguanide antidiabetic agent, a glitazone antidiabetic agent, and a **sulfonylurea** antidiabetic agent.

DETD . . . fumarate (e.g., FEOSTAT.TM.), ferrous gluconate (e.g., FERGON.TM.), polysaccharide-iron complex (e.g., NIFEREX.TM.), iron dextran injection (e.g., INFED.TM.), cupric sulfate, pyroxidine, riboflavin, **Vitamin B.sub.12**, cyanocobalamin injection (e.g., REDISOL.TM., RUBRAMIN PC.TM.), hydroxocobalamin, folic acid (e.g., FOLVITE.TM.), leucovorin (folinic acid, 5-CHOH4PteGlu, citrovorum factor) or WELLCOVORIN. . .

AN 2002:78715 USPATFULL

TI Stanniocalcin polynucleotides, polypeptides, and methods based thereon

IN Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
Zhang, Ke-Zhou, Brussels, BELGIUM
Lindsberg, Perttu, Helsinki, FINLAND
Tatlisumak, Turgut, Helsinki, FINLAND
Kaste, Markku, Vantaa, FINLAND
Andersson, Leif C., Helsinki, FINLAND

PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)

PI US 2002042372 A1 20020411
 AI US 2001-840989 A1 20010425 (9)
 RLI Continuation-in-part of Ser. No. WO 2000-US29432, filed on 26 Oct 2000,
 UNKNOWN
 PRAI US 1999-161740P 19991027 (60)
 DT Utility
 FS APPLICATION
 LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
 CLMN Number of Claims: 47
 ECL Exemplary Claim: 1
 DRWN 12 Drawing Page(s)
 LN.CNT 9559
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 48 OF 52 USPATFULL

SUMM . . . and increases clearance due to the aggregate's immunogenic activity. (Pinckard et al., Clin. Exp. Immunol. 2:331-340 (1967); Robbins et al., **Diabetes** 36: 838-845 (1987); Cleland et al., Crit. Rev. Therapeutic Drug Carrier Systems 10:307-377 (1993)).
 SUMM . . . thrombocytopenia, idiopathic thrombocytopenia purpura, purpura (e.g., Henloch-Schoenlein purpura), autoimmune cytopenia, Goodpasture's syndrome, Pemphigus vulgaris, myasthenia gravis, Grave's disease (hyperthyroidism), and insulin-resistant **diabetes** mellitus.
 SUMM . . . polychondritis, rheumatic heart disease, neuritis, uveitis, ophthalmia, polyendocrinopathies, Reiter's Disease, Stiff-Man Syndrome, autoimmune pulmonary inflammation, autism, Guillain-Barre Syndrome, insulin dependent **diabetes** mellitus, and autoimmune inflammatory eye disorders.
 SUMM . . . and complement in basement membrane), Sjogren's syndrome (often characterized, e.g., by multiple tissue antibodies, and/or a specific nonhistone ANA (SS-B)), **diabetes** mellitus (often characterized, e.g., by cell-mediated and humoral islet cell antibodies), and adrenergic drug resistance (including adrenergic drug resistance with. . . .
 SUMM . . . characterized by inflammation (e.g., hepatitis, rheumatoid arthritis, gout, trauma, pancreatitis, sarcoidosis, dermatitis, renal ischemia-reperfusion injury, Grave's disease, systemic lupus erythematosus, **diabetes** mellitus, and allogenic transplant rejection).
 SUMM . . . autoimmune and chronic inflammatory and infective diseases. Examples of autoimmune diseases are described herein and include multiple sclerosis, and insulin-dependent **diabetes**.
 SUMM . . . hypochromic anemia, microcytic anemia, chlorosis, hereditary sideroblastic anemia, idiopathic acquired sideroblastic anemia, red cell aplasia, megaloblastic anemia (e.g., pernicious anemia, (**vitamin** B12 deficiency) and folic acid deficiency anemia), aplastic anemia, hemolytic anemias (e.g., autoimmune hemolytic anemia, microangiopathic hemolytic anemia, and paroxysmal. . . .
 SUMM . . . are not limited to, infantile genetic agranulocytosis, familial neutropenia, cyclic neutropenia, neutropenias resulting from or associated with dietary deficiencies (e.g., **vitamin** B 12 deficiency or folic acid deficiency), neutropenias resulting from or associated with drug treatments (e.g., antibiotic regimens such as. . . .
 SUMM . . . treat metabolic and congenital disorders of the kidney (e.g., uremia, renal amyloidosis, renal osteodystrophy, renal tubular acidosis, renal glycosuria, nephrogenic **diabetes** insipidus, cystinuria, Fanconi's syndrome, renal fibrocystic osteosis (renal rickets), Hartnup disease, Bartter's syndrome, Liddle's syndrome, polycystic kidney disease, medullary cystic disease, medullary sponge kidney, Alport's syndrome, nail-patella syndrome, congenital nephrotic syndrome, CRUSH syndrome, horseshoe kidney, diabetic nephropathy, nephrogenic

diabetes insipidus, analgesic nephropathy, kidney stones, and membranous nephropathy), and autoimmune disorders of the kidney (e.g., systemic lupus erythematosus (SLE), Goodpasture. . .

SUMM . . . such as, for example, ammonium metavanadate, sodium metavanadate, and sodium orthovanadate. Suitable vanadyl complexes include, for example, vanadyl acetylacetonate and **vanadyl sulfate** including **vanadyl sulfate** hydrates such as **vanadyl sulfate** mono- and trihydrates.

SUMM . . . venous stasis ulcers, burns resulting from heat exposure or chemicals, and other abnormal wound healing conditions such as uremia, malnutrition, **vitamin** deficiencies and complications associated with systemic treatment with steroids, radiation therapy and antineoplastic drugs and antimetabolites. Polynucleotides or polypeptides, as. . .

SUMM . . . polypeptides, as well as agonists or antagonists of the present invention, could be used treat or prevent the onset of **diabetes** mellitus. In patients with newly diagnosed Types I and II **diabetes**, where some islet cell function remains, polynucleotides or polypeptides, as well as agonists or antagonists of the present invention, could. . .

SUMM . . . the nervous system is destroyed or injured by a nutritional disorder or disorder of metabolism including, but not limited to, **vitamin** B12 deficiency, folic acid deficiency, Wernicke disease, tobacco-alcohol amblyopia, Marchiafava-Bignami disease (primary degeneration of the corpus callosum), and alcoholic cerebellar degeneration; (7) neurological lesions associated with systemic diseases including, but not limited to, **diabetes** (diabetic neuropathy, Bell's palsy), systemic lupus erythematosus, carcinoma, or sarcoidosis; (8) lesions caused by toxic substances including alcohol, lead, or. . .

SUMM [0636] Endocrine system and/or hormone imbalance disorders and/or diseases include disorders and/or diseases of the pancreas, such as, for example, **diabetes** mellitus, **diabetes** insipidus, congenital pancreatic agenesis, pheochromocytoma--islet cell tumor syndrome; disorders and/or diseases of the adrenal glands such as, for example, Addison's. . .

SUMM . . . to this gene and/or agonists and/or antagonists thereof may be used to diagnose, prognose, treat, prevent, and/or ameliorate type I **diabetes** mellitus (insulin dependent **diabetes** mellitus, IDDM).

SUMM . . . to this gene and/or agonists and/or antagonists thereof may be used to diagnose, prognose, treat, prevent, and/or ameliorate type II **diabetes** mellitus (insulin resistant **diabetes** mellitus).

SUMM . . . antagonistic antibodies) may be used to diagnose, prognose, treat, prevent, or ameliorate conditions associated with (type I or type II) **diabetes** mellitus, including, but not limited to, diabetic ketoacidosis, diabetic coma, nonketotic hyperglycemic-hyperosmolar coma, seizures, mental confusion, drowsiness, cardiovascular disease (e.g., . . .

SUMM [0651] Other disorders and/or diseases of the male reproductive system include, for example, Klinefelter's syndrome, Young's syndrome, premature ejaculation, **diabetes** mellitus, cystic fibrosis, Kartagener's syndrome, high fever, multiple sclerosis, and gynecomastia.

SUMM . . . abortion, complete abortion, habitual abortion, missed abortion, and septic abortion; ectopic pregnancy, anemia, Rh incompatibility, vaginal bleeding during pregnancy, gestational **diabetes**, intrauterine growth retardation, polyhydramnios, HELLP syndrome, abruptio placentae, placenta previa, hyperemesis, preeclampsia, eclampsia, herpes gestationis, and urticaria of pregnancy. Additionally, . . . high blood pressure, anemia, kidney disease, infectious disease (e.g., rubella, cytomegalovirus, toxoplasmosis,

infectious hepatitis, chlamydia, HIV, AIDS, and genital herpes), **diabetes** mellitus, Graves' disease, thyroiditis, hypothyroidism, Hashimoto's thyroiditis, chronic active hepatitis, cirrhosis of the liver, primary biliary cirrhosis, asthma, systemic lupus. . .

DETD . . . such as, for example, ammonium metavanadate, sodium metavanadate, and sodium orthovanadate. Suitable vanadyl complexes include, for example, vanadyl acetylacetonate and **vanadyl sulfate** including **vanadyl sulfate** hydrates such as **vanadyl sulfate** mono- and trihydrates.

DETD . . . administered in combination with one or more of the following: a biguanide antidiabetic agent, a glitazone antidiabetic agent, and a **sulfonylurea** antidiabetic agent.

DETD . . . fumarate (e.g., FEOSTAT.TM.), ferrous gluconate (e.g., FERGRAN.TM.), polysaccharide-iron complex (e.g., NIFEREX.TM.), iron dextran injection (e.g., INFED.TM.), cupric sulfate, pyroxidine, riboflavin, **Vitamin B**, sub.2, cyanocobalamin injection (e.g., REDISOL.TM., RUBRAMIN PC.TM.), hydroxocobalamin, folic acid (e.g., FOLVITE.TM.), leucovorin (folinic acid, 5-CHOH4PteGlu, citrovorum factor) or WELLCOVORIN. . .

AN 2002:66870 USPATFULL

TI IL-6-like polynucleotides, polypeptides, and antibodies

IN Ruben, Steven M., Olney, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES

PI US 2002037523 A1 20020328

AI US 2001-875016 A1 20010607 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US33134, filed on 7 Dec 2000, UNKNOWN

PRAI US 1999-169838P 19991209 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 11587

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 49 OF 52 USPATFULL

SUMM . . . and increases clearance due to the aggregate's immunogenic activity. (Pinckard et al., Clin. Exp. Immunol. 2:331-340 (1967); Robbins et al., **Diabetes** 36: 838-845 (1987); Cleland et al., Crit. Rev. Therapeutic Drug Carrier Systems 10:307-377 (1993)).

SUMM . . . thrombocytopenia, idiopathic thrombocytopenia purpura, purpura (e.g., Henloch-Schoenlein purpura), autoimmune cytopenia, Goodpasture's syndrome, Pemphigus vulgaris, myasthenia gravis, Grave's disease (hyperthyroidism), and insulin-resistant **diabetes** mellitus.

SUMM . . . polychondritis, rheumatic heart disease, neuritis, uveitis, ophthalmia, polyendocrinopathies, Reiter's Disease, Stiff-Man Syndrome, autoimmune pulmonary inflammation, autism, Guillain-Barre Syndrome, insulin dependent **diabetes** mellitus, and autoimmune inflammatory eye disorders.

SUMM . . . and complement in basement membrane), Sjogren's syndrome (often characterized, e.g., by multiple tissue antibodies, and/or a specific nonhistone ANA (SS-B)), **diabetes** mellitus (often characterized, e.g., by cell-mediated and humoral islet cell antibodies), and adrenergic drug resistance (including adrenergic drug resistance with. . .

SUMM . . . characterized by inflammation (e.g., hepatitis, rheumatoid arthritis, gout, trauma, pancreatitis, sarcoidosis, dermatitis, renal ischemia-reperfusion injury, Grave's disease, systemic lupus erythematosus, **diabetes** mellitus, and allogenic transplant rejection).

SUMM . . . autoimmune and chronic inflammatory and infective diseases. Examples of autoimmune diseases are described herein and include multiple sclerosis, and insulin-dependent **diabetes**.

SUMM . . . hypochromic anemia, microcytic anemia, chlorosis, hereditary sideroblastic anemia, idiopathic acquired sideroblastic anemia, red cell aplasia, megaloblastic anemia (e.g., pernicious anemia, (**vitamin** B12 deficiency) and folic acid deficiency anemia), aplastic anemia, hemolytic anemias (e.g., autoimmune hemolytic anemia, microangiopathic hemolytic anemia, and paroxysmal. . .

SUMM . . . are not limited to, infantile genetic agranulocytosis, familial neutropenia, cyclic neutropenia, neutropenias resulting from or associated with dietary deficiencies (e.g., **vitamin** B 12 deficiency or folic acid deficiency), neutropenias resulting from or associated with drug treatments (e.g., antibiotic regimens such as. . .

SUMM . . . treat metabolic and congenital disorders of the kidney (e.g., uremia, renal amyloidosis, renal osteodystrophy, renal tubular acidosis, renal glycosuria, nephrogenic **diabetes** insipidus, cystinuria, Fanconi's syndrome, renal fibrocystic osteosis (renal rickets), Hartnup disease, Bartter's syndrome, Liddle's syndrome, polycystic kidney disease, medullary cystic disease, medullary sponge kidney, Alport's syndrome, nail-patella syndrome, congenital nephrotic syndrome, CRUSH syndrome, horseshoe kidney, diabetic nephropathy, nephrogenic **diabetes** insipidus, analgesic nephropathy, kidney stones, and membranous nephropathy), and autoimmune disorders of the kidney (e.g., systemic lupus erythematosus (SLE), Goodpasture. . .

SUMM . . . such as, for example, ammonium metavanadate, sodium metavanadate, and sodium orthovanadate. Suitable vanadyl complexes include, for example, vanadyl acetylacetonate and **vanadyl sulfate** including **vanadyl sulfate** hydrates such as **vanadyl sulfate** mono- and trihydrates.

SUMM . . . venous stasis ulcers, burns resulting from heat exposure or chemicals, and other abnormal wound healing conditions such as uremia, malnutrition, **vitamin** deficiencies and complications associated with systemic treatment with steroids, radiation therapy and antineoplastic drugs and antimetabolites. Polynucleotides or polypeptides, as. . .

SUMM . . . polypeptides, as well as agonists or antagonists of the present invention, could be used to treat or prevent the onset of **diabetes** mellitus. In patients with newly diagnosed Types I and II **diabetes**, where some islet cell function remains, polynucleotides or polypeptides, as well as agonists or antagonists of the present invention, could. . .

SUMM . . . the nervous system is destroyed or injured by a nutritional disorder or disorder of metabolism including, but not limited to, **vitamin** B12 deficiency, folic acid deficiency, Wernicke disease, tobacco-alcohol amblyopia, Marchiafava-Bignami disease (primary degeneration of the corpus callosum), and alcoholic cerebellar degeneration; (7) neurological lesions associated with systemic diseases including, but not limited to, **diabetes** (diabetic neuropathy, Bell's palsy), systemic lupus erythematosus, carcinoma, or sarcoidosis; (8) lesions caused by toxic substances including alcohol, lead, or. . .

SUMM [0654] Endocrine system and/or hormone imbalance disorders and/or diseases include disorders and/or diseases of the pancreas, such as, for example, **diabetes** mellitus, **diabetes** insipidus, congenital pancreatic agenesis, pheochromocytoma--islet cell tumor syndrome; disorders and/or diseases of the adrenal glands such as, for example, Addison's. . .

SUMM . . . to this gene and/or agonists and/or antagonists thereof may be used to diagnose, prognose, treat, prevent, and/or ameliorate type I **diabetes** mellitus (insulin dependent **diabetes**

mellitus, IDDM).

SUMM . . . to this gene and/or agonists and/or antagonists thereof may be used to diagnose, prognose, treat, prevent, and/or ameliorate type II **diabetes mellitus** (insulin resistant **diabetes mellitus**).

SUMM . . . antagonistic antibodies) may be used to diagnose, prognose, treat, prevent, or ameliorate conditions associated with (type I or type II) **diabetes mellitus**, including, but not limited to, diabetic ketoacidosis, diabetic coma, nonketotic hyperglycemic-hyperosmolar coma, seizures, mental confusion, drowsiness, cardiovascular disease (e.g.,.

SUMM [0669] Other disorders and/or diseases of the male reproductive system include, for example, Klinefelter's syndrome, Young's syndrome, premature ejaculation, **diabetes mellitus**, cystic fibrosis, Kartagener's syndrome, high fever, multiple sclerosis, and gynecomastia.

SUMM . . . abortion, complete abortion, habitual abortion, missed abortion, and septic abortion; ectopic pregnancy, anemia, Rh incompatibility, vaginal bleeding during pregnancy, gestational **diabetes**, intrauterine growth retardation, polyhydramnios, HELLP syndrome, abruptio placentae, placenta previa, hyperemesis, preeclampsia, eclampsia, herpes gestationis, and urticaria of pregnancy. Additionally,. . . high blood pressure, anemia, kidney disease, infectious disease (e.g., rubella, cytomegalovirus, toxoplasmosis, infectious hepatitis, chlamydia, HIV, AIDS, and genital herpes), **diabetes mellitus**, Graves' disease, thyroiditis, hypothyroidism, Hashimoto's thyroiditis, chronic active hepatitis, cirrhosis of the liver, primary biliary cirrhosis, asthma, systemic lupus. . .

DETD . . . such as, for example, ammonium metavanadate, sodium metavanadate, and sodium orthovanadate. Suitable vanadyl complexes include, for example, vanadyl acetylacetonate and **vanadyl sulfate** including **vanadyl sulfate** hydrates such as **vanadyl sulfate** mono- and trihydrates.

DETD . . . administered in combination with one or more of the following: a biguanide antidiabetic agent, a glitazone antidiabetic agent, and a **sulfonylurea** antidiabetic agent.

DETD . . . fumarate (e.g., FEOSTAT.TM.), ferrous gluconate (e.g., FERGON.TM.), polysaccharide-iron complex (e.g., NIFEREXT.TM.), iron dextran injection (e.g., INFED.TM.), cupric sulfate, pyroxidine, riboflavin, **Vitamin B.sub.12**, cyanocobalamin injection (e.g., REDISOL.TM., RUBRAMIN PC.TM.), hydroxocobalamin, folic acid (e.g., FOLVITE.TM.), leucovorin (folinic acid, 5-CHOH4PteGlu, citrovorum factor) or WELLCOVORIN. . .

AN 2002:12261 USPATFULL

TI Uteroglobin-like polynucleotides, polypeptides, and antibodies

IN Ni, Jian, Germantown, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002006640 A1 20020117

AI US 2001-846258 A1 20010502 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US30326, filed on 3 Nov 2000, UNKNOWN

PRAI US 1999-163395P 19991104 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 12076

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 50 OF 52 USPATFULL

SUMM [0003] Natural retinoids regulate the growth and differentiation of a

wide variety of cell types, and include **Vitamin A** and its biologically active derivatives retinal and retinoic acid. Retinoids act as morphogenic agents during embryonic development, and play. . .

- SUMM . . . nuclear hormone receptors by retinoid binding, these receptors undergo homodimerization or heterodimerization with other family members, including thyroid hormone receptor, **vitamin D** receptor, and retinoid X receptor interacting proteins (RIPs), such as RIP14 and RIP15 (Seol, W., et al, (1995)). These. . .
- SUMM . . . and increases clearance due to the aggregate's immunogenic activity. (Pinckard et al., Clin. Exp. Immunol. 2:331-340 (1967); Robbins et al., **Diabetes** 36: 838-845 (1987); Cleland et al., Crit. Rev. Therapeutic Drug Carrier Systems 10:307-377 (1993)).
- SUMM . . . thrombocytopenia, idiopathic thrombocytopenia purpura, purpura (e.g., Henloch-Schoenlein purpura), autoimmune cytopenia, Goodpasture's syndrome, Pemphigus vulgaris, myasthenia gravis, Grave's disease (hyperthyroidism), and insulin-resistant **diabetes** mellitus.
- SUMM . . . polychondritis, rheumatic heart disease, Neuritis, Uveitis Ophthalmia, Polyendocrinopathies, Reiter's Disease, Stiff-Man Syndrome, Autoimmune Pulmonary Inflammation, Autism, Guillain-Barre Syndrome, insulin dependent **diabetes** mellitus, and autoimmune inflammatory eye.
- SUMM . . . and complement in basement membrane), Sjogren's syndrome (often characterized, e.g., by multiple tissue antibodies, and/or a specific nonhistone ANA (SS-B)), **diabetes** mellitus (often characterized, e.g., by cell-mediated and humoral islet cell antibodies), and adrenergic drug resistance (including adrenergic drug resistance with. . .
- SUMM . . . inflammation (such as, e.g., hepatitis, rheumatoid arthritis, gout, trauma, pancreatitis, sarcoidosis, dermatitis, renal ischemia-reperfusion injury, Grave's disease, systemic lupus erythematosus, **diabetes** mellitus, and allogenic transplant rejection).
- SUMM . . . autoimmune and chronic inflammatory and infective diseases. Examples of autoimmune diseases are described herein and include multiple sclerosis, and insulin-dependent **diabetes**.
- SUMM . . . such as, for example, ammonium metavanadate, sodium metavanadate, and sodium orthovanadate. Suitable vanadyl complexes include, for example, vanadyl acetylacetonate and **vanadyl sulfate** including **vanadyl sulfate** hydrates such as **vanadyl sulfate** mono- and trihydrates.
- SUMM . . . venous stasis ulcers, burns resulting from heat exposure or chemicals, and other abnormal wound healing conditions such as uremia, malnutrition, **vitamin** deficiencies and complications associated with systemic treatment with steroids, radiation therapy and antineoplastic drugs and antimetabolites. Polynucleotides or polypeptides, as. . .
- SUMM . . . polypeptides, as well as agonists or antagonists of the present invention, could be used treat or prevent the onset of **diabetes** mellitus. In patients with newly diagnosed Types I and II **diabetes**, where some islet cell function remains, polynucleotides or polypeptides, as well as agonists or antagonists of the present invention, could. . .
- SUMM [0597] Endocrine system and/or hormone imbalance disorders and/or diseases include disorders and/or diseases of the pancreas, such as, for example, **diabetes** mellitus, **diabetes** insipidus, congenital pancreatic agenesis, pheochromocytoma--islet cell tumor syndrome; disorders and/or diseases of the adrenal glands such as, for example, Addison's. . .
- SUMM . . . to this gene and/or agonists and/or antagonists thereof may be used to diagnose, prognose, treat, prevent, and/or ameliorate type I **diabetes** mellitus (insulin dependent **diabetes** mellitus, IDDM).

SUMM . . . to this gene and/or agonists and/or antagonists thereof may be used to diagnose, prognose, treat, prevent, and/or ameliorate type II **diabetes mellitus** (insulin resistant **diabetes mellitus**).

SUMM . . . antagonistic antibodies) may be used to diagnose, prognose, treat, prevent, or ameliorate conditions associated with (type I or type II) **diabetes mellitus**, including, but not limited to, diabetic ketoacidosis, diabetic coma, nonketotic hyperglycemic-hyperosmolar coma, seizures, mental confusion, drowsiness, cardiovascular disease (e.g., .

SUMM . . . the nervous system is destroyed or injured by a nutritional disorder or disorder of metabolism including, but not limited to, **vitamin B12** deficiency, folic acid deficiency, Wernicke disease, tobacco-alcohol amblyopia, Marchiafava-Bignami disease (primary degeneration of the corpus callosum), and alcoholic cerebellar degeneration; (7) neurological lesions associated with systemic diseases including, but not limited to, **diabetes** (diabetic neuropathy, Bell's palsy), systemic lupus erythematosus, carcinoma, or sarcoidosis; (8) lesions caused by toxic substances including alcohol, lead, or. .

DETD . . . such as, for example, ammonium metavanadate, sodium metavanadate, and sodium orthovanadate. Suitable vanadyl complexes include, for example, vanadyl acetylacetonate and **vanadyl sulfate** including **vanadyl sulfate** hydrates such as **vanadyl sulfate** mono- and trihydrates.

DETD . . . administered in combination with one or more of the following: a biguanide antidiabetic agent, a glitazone antidiabetic agent, and a **sulfonylurea** antidiabetic agent.

DETD . . . fumarate (e.g., FEOSTAT.TM.), ferrous gluconate (e.g., FERGON.TM.), polysaccharide-iron complex (e.g., NIFEREX.TM.), iron dextran injection (e.g., INFED.TM.), cupric sulfate, pyroxidine, riboflavin, **Vitamin B.sub.12**, cyanocobalamin injection (e.g., REDISOL.TM., RUBRAMIN PC.TM.), hydroxocobalamin, folic acid (e.g., FOLVITE.TM.), leucovorin (folinic acid, 5-CHOH4PteGlu, citrovorum factor) or WELLCOVORIN. . .

AN 2002:8489 USPATFULL

TI Retinoid receptor interacting polynucleotides, polypeptides, and antibodies

IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

PI US 2002004489 A1 20020110

AI US 2001-788600 A1 20010221 (9)

RLI Continuation-in-part of Ser. No. WO 2000-US22351, filed on 15 Aug 2000, UNKNOWN

PRAI US 1999-148757P 19990816 (60)
US 2000-189026P 20000314 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 11257

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 51 OF 52 USPATFULL

AB A daily nutritional supplement and method of administering it to assist in the metabolism of glucose for patients with **diabetes** and pre-**diabetes** is disclosed. The supplement preferably includes anchor components of Chromium Polynicotinate and Picolinate, **Vanadyl Sulfate**, **Vitamin E Natural**, Standardized Willow Bark (aspirin), and Magnesium Chloride, Citrate,

Fumarate, Malate, Glutamate, and Succinate Complex, Folic Acid, and Alpha-Lipoic.

SUMM The present invention is related to a unique **vitamin**, mineral, and herbal supplement for the treatment of both type I and II **diabetes**, and for the prevention of type II **diabetes** in those individuals with pre-**diabetes**, or impaired glucose tolerance (IGT). Specifically, the present invention is directed towards a dietary supplement for diabetic control containing a plurality of compounds from the following group: **Vanadyl sulfate**, Chromium polynicotinate and picolinate, Magnesium chloride, citrate, fumarate, malate, glutamate, and succinate complex, Natural **Vitamin E** (free 2R, 4'R, 8'R-alpha tocopherol), Standardized Willow Bark (aspirin), Alpha-lipoic acid, and Folic acid.

SUMM **Diabetes** has become a leading health care issue in the United States and other industrialized countries, accounting for one seventh of the entire national health care product. The incidence of diagnosed **diabetes** has increased five-fold in America over the past 35 years, with currently 8 million diagnosed diabetic patients, another estimated 8 to 12 million undiagnosed diabetic individuals, and still an additional 23 million Americans with pre-**diabetes**, or impaired glucose tolerance (IGT). As the American populace continues its strong trend towards aging, obesity and greater minority representation, the increasing rate of diagnosed **diabetes** is certain to continue.

SUMM The tremendous economic and physical toll **diabetes** extracts from society is, in large part, secondary to both the short and long-term complications of the disease. While there have been great strides made in reducing the short term complications of **diabetes**, e.g. ketoacidosis, dehydration, and non-ketotic hyperosmolar coma, little, if any, headway has been made in preventing or even minimizing the devastating chronic complications of the disease, e.g. premature atherosclerosis, retinopathy, nephropathy, and neuropathy. Indeed, **diabetes** has become the leading cause of new cases of blindness in adults in the United States, and now accounts for.

SUMM **Diabetes** is a major cardiovascular risk factor, especially among women. This increased risk factor in women is a fact lost by. . . in both the medical and lay communities. Indeed, a man's risk of dying by heart disease doubles when he develops **diabetes**, but a woman's risk increases three to five-fold the day she is found to have **diabetes**. The failure to reduce this increased risk for heart disease over the last eight decades of **diabetes** management is a painful reminder that our current interventions, while having the potential for more favorable impact, are woefully inadequate.

SUMM Type II **diabetes** [(i.e. maturity onset)], which accounts for 95% of **diabetes**, is far more than just a state of abnormal glucose metabolism, but is rather a milieu of co-existent cardiovascular metabolic. . . elevated blood pressure: a state recently identified as Syndrome X. Much of the excessive cardiovascular morbidity and mortality associated with **diabetes** is secondary to this array of cardiovascular risk factors, which precede the onset of **diabetes** by as much as a decade and may explain the presence of overt clinical cardiovascular disease in as many as. . .

SUMM . . . such as hypertension, dyslipidemia and cigarette smoking. The inventor of the present invention has popularized the term "dead zone of **diabetes**" to describe this phenomenon of increased cardiovascular risk even after allowing for the co-existence of other risk factors in **diabetes**. This "dead zone" is secondary to both the atherogenicity of insulin resistance, which precedes the onset of **diabetes** by at least 8 years, and the atherogenicity of undiagnosed and uncontrolled hyperglycemia, which is present for 9-12 years before **diabetes** is first diagnosed. Treatment of **diabetes**, and its related chronic symptoms and risk factors, are

best treated at this early stage.

SUMM If the medical community is to have any success in attenuating the cardiovascular ravages of **diabetes**, it must stress interventions that reduce insulin resistance, an integral part of type II **diabetes**, and aggressively control blood glucose, through earlier diagnosis and improved management of **diabetes**. That is precisely why exercise and dietary modification will always be the mainstay of diabetic management, because both will improve insulin sensitivity and glucose control. Until recently the only available pharmacologic (**sulfonylureas** and insulin) interventions in this country for **diabetes**, poorly controlled with exercise and diet, did not address insulin resistance and were inappropriate for use in early type II **diabetes**. Not surprisingly, their use has failed to reduce the excessive car vascular morbidity of **diabetes**, and, indeed, may even be associated with increased risk of cardiovascular disease.

SUMM . . . to reduce insulin resistance, i.e. insulin sensitizers or enhancers, which hopefully may impact more favorably on the cardiovascular complications of **diabetes**. Unfortunately, these drugs require a prescription and their use in **diabetes** is markedly delayed, which will likely blunt their efficacy in reducing cardiovascular risk. Indeed, troglitazone was initially indicated in type II **diabetes** only in combination with insulin, precluding its use in early **diabetes**.

SUMM . . . developing in these high risk patients. There is also a need to provide an effective supplement for the treatment of **diabetes** and its symptoms prior to the onset of full-blown **diabetes**.

SUMM The present invention focuses upon a new and unique dietary supplement specifically formulated for people with **diabetes** and pre-**diabetes** (IGT). This formulation is based upon well-designed, randomized, placebo-controlled double-blind human studies, using specific minerals and trace minerals, antioxidant vitamins. . . improve blood glucose control, insulin sensitivity, lipid abnormalities, blood pressure, and reduce the risk of heart disease in people with **diabetes**.

SUMM . . . a source of chromium, an effective amount of a source of vanadium, an effective amount of a source of magnesium, **vitamin E** and aspirin, and an effective amount of folic acid and alpha-lipoic acid.

SUMM . . . preferred supplement includes an effective amount of chromium polynicotinate and chromium picolinate as the chromium source, an effective amount of **vanadyl sulfate** as the vanadium source, an effective amount of magnesium chloride, citrate, fumarate, malate, glutarate and succinate complex as the magnesium source, an effective amount of free 2R, 4'R, 8'R-alpha tocopherol as the natural **Vitamin E** source, an effective amount of standardized willow bark as the source of aspirin, an effective amount of folic acid and alpha-lipoic acid, as well as sufficient amounts of **vitamin** and mineral supplements.

SUMM . . . about 200 mcg and about 1500 mg chromium picolinate and/or chromium polynicotinate, between about 10 mg and about 100 mg **vanadyl sulfate**, and between about 300 mg and about 400 mg magnesium chloride, citrate, fumarate, malate, glutarate and succinate complex, between about. . . about 30 days. The most preferred daily nutritional supplement contains about 1000 mcg chromium polynicotinate and/or picolinate, about 100 mg **vanadyl sulfate**, about 384 mg magnesium chloride, citrate, fumarate, malate, glutarate and succinate complex, about 400 I.U. free 2R, 4'.F, 8'R-alpha tocopherol, . . .

SUMM The present invention is related to a unique **vitamin**, mineral, and herbal supplement for the treatment of both type I and II **diabetes**, and for the prevention of type II **diabetes**

in those individuals with pre-**diabetes**, or impaired glucose tolerance (IGT). Specifically, the present invention is directed towards a dietary supplement for diabetic control containing a plurality of compounds from the following group: **Vanadyl sulfate**, Chromium polynicotinate and picolinate, Magnesium chloride, citrate, fumarate, malate, glutarate, and succinate complex, Natural **Vitamin E** (free 2R, 4'R, 8'R- α tocopherol), Standardized Willow Bark (aspirin), Alpha-lipoic acid, and Folic acid.

SUMM . . . daily administration of the nutritional supplement. The daily doses of the anchor or key components listed above, in combination with **vitamin** and mineral supplements, can be used in patients to prevent the development of full blown **diabetes** or, where the person has **diabetes**, to reduce the amount of insulin required to control blood glucose levels.

DETD . . . provides a dietary supplement that enhances glucose metabolism, while treating many of the secondary or risk factors that often accompany **diabetes** or IGT. While the supplement may be used by individuals with no apparent symptoms of **diabetes**, the supplement is ideal for use by individuals with IGT and **diabetes** to prevent, reduce or eliminate the necessity of using insulin or other anti-diabetic medications. However, the supplement contains ingredients which. . .

DETD Nutritional supplements according to the present invention are not intended to supplant other forms of **diabetes** and IGT treatment, such as the appropriate diet and exercise, nor does necessarily it eliminate the need for insulin. Rather,. . . has been discovered that a dietary supplement containing effective amounts of metabolically available forms of vanadium, chromium, magnesium, and natural **vitamin E** in combination with naturally available sources of aspirin, alpha lipoic acid, and folic acid will improve the metabolism of glucose and arrest or treat many of the cardiovascular complications or risk factors associated with **diabetes** or prediabetes. These components perform different functions which, when administered in appropriate dosages and forms, enhance the metabolism of glucose. . . itself, while at the same time prevent or reduce the likelihood of a cardiovascular event due to complications associated with **diabetes**. The importance of each of these key or "anchor" components is set forth below:

DETD . . . and building muscle mass, are scientifically unfounded, especially in its use for non diabetic individuals. Indeed, chromium supplementation, even in **diabetes**, is unsettled with the American **Diabetes** Association's Position Statement declaring, "The only known circumstance in which chromium replacement has any beneficial effect on glycemic, control is. . .

DETD . . . for chromium supplementation in those individuals who are obviously chromium deficient, the actual prevalence of chromium deficiency in people with **diabetes** has never been, nor could it be, established. Nonetheless, chromium deficiency is common in diabetic patients, who have lower plasma. . .

DETD **Vanadyl Sulfate** (preferred dosage range 10.00-100.00 mg.; most preferred embodiment is 100.00 mg)

DETD . . . human tissue, has a well documented insulin enhancing effect in laboratory animals. After extensive studies using vanadate in diabetic rats, **vanadyl sulfate** 100 mg daily was found to significantly improve both hepatic and peripheral insulin sensitivity in patients with type II **diabetes**. **Vanadyl sulfate** was the preparation of vanadium chosen because it was not associated with any apparent toxicity during treatment periods of up. . .

DETD In a recently published study of moderately obese, insulin resistant type II diabetic patients, treatment with oral **vanadyl sulfate** 100 mg daily for three weeks resulted in a significant

drop in fasting blood glucose levels and a highly significant. . . of cholesterol and a decline, though not statistically significant, in serum triglycerides. Using the hyperinsulinemic-euglycemic clamp, it was shown that **vanadyl sulfate** dramatically enhanced insulin mediated glucose disposal with an 82% increase in glucose infusion rate. There was also significant reduction in hepatic glucose production, likely secondary to a potentiation of insulin's inhibitory effect on lipolysis by **vanadyl sulfate**. As in the previous studies, **vanadyl sulfate** was well tolerated.

DETD Magnesium, rather, magnesium deficiency, has long been known to be associated with **diabetes**, both type I and type II. Unlike some of the uncertainties regarding the incidence of chromium deficiency in **diabetes**, much more is known about the epidemiology and diagnosis of magnesium deficiency in **diabetes**, though discord regarding the actual prevalence of magnesium deficiency abounds. Indeed, magnesium deficiency may be the most underappreciated and underdiagnosed. . . .

DETD . . . been linked to the Reaven-Modan syndrome and underlies the well-known association of magnesium deficiency to essential hypertension, insulin resistance, hyperinsulinemia, **diabetes**, congestive heart failure and ischemic heart disease. Also, magnesium deficiency has been associated with an increase in platelet reactivity, a condition known to exist in patients with **diabetes**, and may help explain the accelerated atherosclerosis and increased rate of acute thrombotic events that so tragically define **diabetes**. Finally, hypomagnesemia has been implicated in the retinopathic microvascular complication of **diabetes**, with lower levels of magnesium predicting a greater risk of severe diabetic retinopathy.

DETD While it is universally accepted that magnesium deficiency is common in both type I and type II **diabetes**, it is unclear as to the precise incidence of this condition in **diabetes**. The diabetic patient is certainly at risk for developing magnesium depletion via inadequate dietary intake and gastrointestinal and renal losses,. . . very specific, assessment of magnesium depletion in the body. Even with this exceedingly insensitive measure for magnesium deficiency, patients with **diabetes** have a 25% to 38% prevalence of hypomagnesemia. Using much more sensitive research-oriented tests (nuclear magnetic resonance spectroscopy and magnesium-selective. . . .

DETD Still, the American **Diabetes** Association's position on screening, diagnosing and intervening for magnesium deficiency in patients with **diabetes** remains skeptical, as in the case of chromium deficiency. The inventor of the present invention believes this to be the. . . .

DETD . . . Magnesium, as used in the present invention, is thus expected to improve glucose metabolism and to arrest or reduce any **diabetes** associated secondary risk factors.

DETD **Vitamin E** Natural (free 2R, 4'R, 8'R-alpha tocopherol) (preferred range 400.00-800.00 I.U.; most preferred dosage 400 I.U.)

DETD **Vitamin E** is the most widely studied of the antioxidant vitamins. The interest in **vitamin E** as an antioxidant is based on the many demonstrations in humans that giving **vitamin E** as a supplement decreases the oxidation of low density lipoprotein (LDL) ex vivo, an event critical in the atherogenic. . . .

DETD **Vitamin E** supplementation has been shown to significantly reduce experimentally induced atherosclerosis in primates and more recent epidemiological and interventional human studies appear to support this observation. This assumes greater importance in those with **diabetes**, in view of the fact that as many as 60% of newly diagnosed diabetic patients already have clinically obvious cardiovascular. . . .

DETD . . . disease was observed in a four year, prospective, observational

study in healthy middle-aged men who had higher intakes of dietary **vitamin E** as compared to those consuming small amounts.

DETD . . . at baseline were found to have a highly significant reduced risk of coronary artery disease if they had been on **vitamin E** supplements for at least two years during the eight year study. In a more recent and similar seven year prospective study of postmenopausal women without cardiovascular disease, dietary **vitamin E** consumption, but not **vitamin A** or **C**, was inversely associated with the risk of death from coronary artery disease.

DETD Perhaps the most powerful argument for **vitamin E** supplementation, at least, in those patients with already proven coronary artery disease, is the recently published Cambridge Heart Antioxidant. . . The CHAOS was a nearly three year prospective, secondary interventional trial of 2002 men and women, 10% of whom had **diabetes**, using natural **vitamin E** (free 2R, 4'R, 8'R-alpha tocopherol), 400 or 800 I.U. daily, in a randomized, placebo-controlled, double-blinded design. Either dose of **vitamin E** was associated with a dramatic and significant 77% risk reduction of non-fatal myocardial infarct. The benefit of treatment with **vitamin E** was apparent after 200 days, and the patients with **diabetes** also enjoyed the marked reduction in the risk of non-fatal heart disease.

DETD Another unrelated benefit of **vitamin E** supplementation is the favorable effect it has on insulin sensitivity, glucose metabolism and lipid levels in both healthy subjects and patients with type II **diabetes**. Conversely, in a prospective study of almost one thousand non diabetic, middle-aged men, low concentration of plasma **vitamin E** at baseline was found to be an independent and powerful predictor for the development of type II **diabetes** during the four year study. Remarkably, a low level of **vitamin E** was associated with a greater than five-fold risk of developing **diabetes** in the ensuing four years!

DETD **Vitamin E** was well tolerated in the studies where it was given as a supplement, and in the CHAOS study there. . . effects. Because of the unusually high incidence of clinical heart disease in newly diagnosed diabetic patients, and the favorable effect **vitamin E** has on the metabolic abnormalities of type II **diabetes**, the present invention will contain preferably 400-800 I.U.; and most preferably natural **vitamin E** (free 2R, 4'R, 8'R-alpha tocopherol) 400 I.U.

DETD . . . costs alone would be reduced by \$3 billion per year in this country if the 15 million adults, many with **diabetes**, who qualify for hypolipidemic medication per NCEP guidelines were to first be given aspirin prophylaxis.

DETD . . . enzyme necessary for the synthesis of thromboxane, a potent stimulator of platelet aggregation, a condition known to be increased in **diabetes** and to be causative in the atherosclerotic process. In patients with **diabetes**, aspirin has been shown to correct this abnormal increase in platelet activity.

DETD The cardiovascular protective effect of aspirin in men and women with **diabetes** was demonstrated in the Early Treatment Diabetic Retinopathy Study. Both type I and II patients were randomized to double-blinded placebo. . .

DETD . . . of alpha-lipoic acid to diabetic patients with neuropathy significantly reduces symptoms. Diabetic neuropathy has been an unusually refractive complication of **diabetes**.

DETD These anchor compounds are most preferably combined with other **vitamin** and mineral supplements. These additional ingredients are preferably included with the anchor compounds, and should be taken simultaneously.

DETD . . . that sufficient amounts of the most important minerals and vitamins are available, it is preferred that the supplement also include

vitamin A (or beta carotene), **vitamin C**, calcium, copper, selenium, and zinc.

DETD One example of the preferred embodiment, the "Pro Health Pak," is distributed by **Diabetes** Pro Health of Pittsburgh, Pa. Pro Health Pak consists of two major "components." The first, the so-called backbone of the. . .

DETD 3 tablets Containing Chromium Picolinate and Polynicotinate,

Vanadyl

Sulfate, Vitamin E Natural, Standardized Willow Bark (aspirin),

Folic Acid, Alpha-Lipoic Acid and a Multivitamin/Mineral Formula

1 tablet Containing Magnesium Complex consisting of. . .

DETD Chromium Polynicotinate and Picolinate 200-1500 mcg.

Vanadyl Sulfate Hydrate 10-100 mg.

Vitamin E Natural (free 2R, 4'R 8'R-alpha 400-800 I.U. tocopherol)

Standardized Willow Bark (aspirin 20-40 mg.) 160-320 mg.

Magnesium Chloride, Citrate, II Fumarate, 300-400 mg.

Malate, Gluturate and Succinate Complex

Folic Acid (Folate) 400-600 mcg.

Alpha-Lipoic Acid 0-600 mg.

Vitamin A or Beta Carotene 5000 I.U. or 25,000 I.U.

Vitamin C 60 mg.

Thiamine 3.00 mg.

Riboflavin 3.60 mg.

Niacinamide 20.10 mg.

Vitamin B-6 23.10 mg.

Vitamin B-12 48.00 mcg.

Biotin 300 mcg.

Pantothenic Acid 10.00 mg.

Calcium 150 mg.

Phosphorus 115 mg.

Iodine 150 mcg.

Zinc 15.00 mg.

Selenium 60 mcg.

Copper 2.00 mg.

Manganese. . .

DETD . . . containing a 30 day supply. The daily supplement is provided as an individual packet in which 4 tablets are enclosed. **Diabetes** Pro Health provides to the patient with **diabetes** or prediabetes a readily available and affordable and medically proven addition to their armamentarium for **diabetes** management, something which has been sorely lacking. Pro Health Pak will be recommended for use in patients with **diabetes** or pre-**diabetes** only as part of a complete **diabetes** treatment or prevention program, and will require regular blood glucose monitoring when used in the diabetic patient.

CLM What is claimed is:

. . . chromium comprises one or more of the following: chromium picolinate, and chromium polynicotinate; and said bioavailable source of vanadium comprises **vanadyl sulfate**.

5. The dietary supplement of claim 4, further comprising an effective amount of **Vitamin E**.

. . . supplement of claim 1, wherein said bioavailable source of chromium is chromium polynicotinate, and said bioavailable source of vanadium is **vanadyl sulfate**.

. . . of said bioavailable source of vanadium has the amount of vanadium in about 10 mg to about 100 mg of **vanadyl sulfate**.

9. The dietary supplement of claim 7, further comprising an effective amount **Vitamin E**.

. . . said amount of said bioavailable source of vanadium has at least the amount of vanadium in about 100 mg of **vanadyl sulfate**

12. The dietary supplement of claim 11, further comprising an effective amount of **Vitamin E**.

16. The ingestible formulation of claim 13, further comprising an effective amount of one or more of the following: **Vitamin E**, and magnesium.

. . . or more of the following: chromium picolinate, and chromium polynicotinate; and said complex of said bioavailable source of vanadium comprises **vanadyl sulfate**.

. . . of said bioavailable source of vanadium has the amount of vanadium in about 10 mg to about 100 mg of **vanadyl sulfate**.

19. The ingestible formulation of claim 18, further comprising an effective amount of one or more of the following: **Vitamin E**, and magnesium.

. . . or more of the following: chromium picolinate, and chromium polynicotinate; and said complex of said bioavailable source of vanadium comprises **vanadyl sulfate**.

. . . of said bioavailable source of vanadium delivers the amount of vanadium in about 10 mg to about 100 mg of **vanadyl sulfate**.

. . . method of claim 29, wherein said dietary supplement further comprises an effective amount of one or more of the following: **Vitamin E**, and magnesium.

. . . said complex of said bioavailable source of vanadium delivers at least the amount of vanadium in about 100 mg of **vanadyl sulfate**.

. . . method of claim 31, wherein said dietary supplement further comprises an effective amount of one or more of the following: **Vitamin E**, and magnesium.

AN 2001:40034 USPATFULL|
TI Dietary supplement and method of treatment for diabetic control|
IN Fine, Stuart A., Northbrook, IL, United States
PA Akesis Pharmaceuticals, Inc., San Diego, CA, United States (U.S. corporation)
PI US 6203819 BI 20010320
AI US 1999-272819 19990319 (9)
RLI Continuation of Ser. No. US 1997-964814, filed on 5 Nov 1997
PRAI US 1997-39958P 19970307 (60)
DT Utility|
FS Granted|
EXNAM Primary Examiner: Jarvis, William R. A.|
LREP Foley, Hoag & Eliot|
CLMN Number of Claims: 39|
ECL Exemplary Claim: 1|
DRWN No Drawings

L2 ANSWER 52 OF 52 USPATFULL

AB A daily nutritional supplement and method of administering it to assist in the metabolism of glucose for patients with **diabetes** and pre-**diabetes** is disclosed. The supplement preferably includes anchor components of Chromium Polynicotinate and Picolinate, **Vanadyl Sulfate**, **Vitamin E** Natural, Standardized Willow Bark (aspirin), and Magnesium Chloride, Citrate, Fumarate, Malate, Glutamate, and Succinate Complex, Folic Acid, and Alpha-Lipoic. . . .

SUMM The present invention is related to a unique **vitamin**, mineral, and herbal supplement for the treatment of both type I and II **diabetes**, and for the prevention of type II **diabetes** in those individuals with pre-**diabetes**, or impaired glucose tolerance (IGT). Specifically, the present invention is directed towards a dietary supplement for diabetic control containing a plurality of compounds from the following group: **Vanadyl sulfate**, Chromium polynicotinate and picolinate, Magnesium chloride, citrate, fumarate, malate, glutamate, and succinate complex, Natural **Vitamin E** (free 2R, 4'R, 8'R-alpha tocopherol), Standardized Willow Bark (aspirin), Alpha-lipoic acid, and Folic acid.

SUMM **Diabetes** has become a leading health care issue in the United States and other industrialized countries, accounting for one seventh of the entire national health care product. The incidence of diagnosed **diabetes** has increased five-fold in America over the past 35 years, with currently 8 million diagnosed diabetic patients, another estimated 8 to 12 million undiagnosed diabetic individuals, and still an additional 23 million Americans with pre-**diabetes**, or impaired glucose tolerance (IGT). As the American populace continues its strong trend towards aging, obesity and greater minority representation, the increasing rate of diagnosed **diabetes** is certain to continue.

SUMM The tremendous economic and physical toll **diabetes** extracts from society is, in large part, secondary to both the short and long-term complications of the disease. While there have been great strides made in reducing the short term complications of **diabetes**, e.g. ketoacidosis, dehydration, and non-ketotic hyperosmolar coma, little, if any, headway has been made in preventing or even minimizing the devastating chronic complications of the disease, e.g. premature atherosclerosis, retinopathy, nephropathy, and neuropathy. Indeed, **diabetes** has become the leading cause of new cases of blindness in adults in the United States, and now accounts for. . . .

SUMM **Diabetes** is a major cardiovascular risk factor, especially among women. This increased risk factor in women is a fact lost by. . . in both the medical and lay communities. Indeed, a man's risk of dying by heart disease doubles when he develops **diabetes**, but a woman's risk increases three to five-fold the day she is found to have **diabetes**. The failure to reduce this increased risk for heart disease over the last eight decades of **diabetes** management is a painful reminder that our current interventions, while having the potential for more favorable impact, are woefully inadequate.

SUMM Type II **diabetes** [(i.e. maturity onset)], which accounts for 95% of **diabetes**, is far more than just a state of abnormal glucose metabolism, but is rather a milieu of co-existent cardiovascular metabolic. . . . elevated blood pressure: a state recently identified as Syndrome X. Much of the excessive cardiovascular morbidity and mortality associated with **diabetes** is secondary to this array of cardiovascular risk factors, which precede the onset of **diabetes** by as much as a decade and may explain the presence of overt clinical cardiovascular disease in as many as. . . .

SUMM . . . such as hypertension, dyslipidemia and cigarette smoking. The inventor of the present invention has popularized the term "dead zone of **diabetes**" to describe this phenomenon of increased cardiovascular risk even after allowing for the co-existence of other risk factors in **diabetes**. This "dead zone" is secondary to both the atherogenicity of insulin resistance, which precedes the onset of **diabetes** by at least 8 years, and the atherogenicity of undiagnosed and uncontrolled hyperglycemia, which is present for 9-12 years before **diabetes** is first diagnosed. Treatment of **diabetes**, and its related chronic symptoms and risk factors, are best treated at this early stage.

SUMM If the medical community is to have any success in attenuating the cardiovascular ravages of **diabetes**, it must stress interventions that reduce insulin resistance, an integral part of type II **diabetes**, and aggressively control blood glucose, through earlier diagnosis and improved management of **diabetes**. That is precisely why exercise and dietary modification will always be the mainstay of diabetic management, because both will improve insulin sensitivity and glucose control. Until recently the only available pharmacologic (**sulfonylureas** and insulin) interventions in this country for **diabetes**, poorly controlled with exercise and diet, did not address insulin resistance and were inappropriate for use in early type II **diabetes**. Not surprisingly, their use has failed to reduce the excessive cardiovascular morbidity of **diabetes**, and, indeed, may even be associated with increased risk of cardiovascular disease.

SUMM . . . to reduce insulin resistance, i.e. insulin sensitizers or enhancers, which hopefully may impact more favorably on the cardiovascular complications of **diabetes**. Unfortunately, these drugs require a prescription and their use in **diabetes** is markedly delayed, which will likely blunt their efficacy in reducing cardiovascular risk. Indeed, troglitazone was initially indicated in type II **diabetes** only in combination with insulin, precluding its use in early **diabetes**.

SUMM . . . developing in these high risk patients. There is also a need to provide an effective supplement for the treatment of **diabetes** and its symptoms prior to the onset of full-blown **diabetes**.

SUMM The present invention focuses upon a new and unique dietary supplement specifically formulated for people with **diabetes** and pre-**diabetes** (IGT). This formulation is based upon well-designed, randomized, placebo-controlled double-blind human studies, using specific minerals and trace minerals, antioxidant vitamins. . . improve blood glucose control, insulin sensitivity, lipid abnormalities, blood pressure, and reduce the risk of heart disease in people with **diabetes**.

SUMM . . . a source of chromium, an effective amount of a source of vanadium, an effective amount of a source of magnesium, **vitamin E** and aspirin, and an effective amount of folic acid and alpha-lipoic acid.

SUMM . . . preferred supplement includes an effective amount of chromium polynicotinate and chromium picolinate as the chromium source, an effective amount of **vanadyl sulfate** as the vanadium source, an effective amount of magnesium chloride, citrate, fumarate, malate, glutarate and succinate complex as the magnesium source, an effective amount of free 2R, 4'R, 8'R-alpha tocopherol as the natural **Vitamin E** source, an effective amount of standardized willow bark as the source of aspirin, an effective amount of folic acid and alpha-lipoic acid, as well as sufficient amounts of **vitamin** and mineral supplements.

SUMM . . . about 200 mcg and about 1500 mcg chromium picolinate and/or chromium polynicotinate, between about 10 mg and about 100 mg **vanadyl sulfate**, and between about 300 mg and about

400 mg magnesium chloride, citrate, fumarate, malate, glutarate and succinate complex, between about . . . about 30 days. The most preferred daily nutritional supplement contains about 1000 mcg chromium polynicotinate and/or picolinate, about 100 mg **vanadyl sulfate**, about 384 mg magnesium chloride, citrate, fumarate, malate, glutarate and succinate complex, about 400 I.U. free 2R, 4'R, 8'R-alpha tocopherol, . . .

SUMM . . . daily administration of the nutritional supplement. The daily doses of the anchor or key components listed above, in combination with **vitamin** and mineral supplements, can be used in patients to prevent the development of full blown **diabetes** or, where the person has **diabetes**, to reduce the amount of insulin required to control blood glucose levels.

DETD . . . provides a dietary supplement that enhances glucose metabolism, while treating many of the secondary or risk factors that often accompany **diabetes** or IGT. While the supplement may be used by individuals with no apparent symptoms of **diabetes**, the supplement is ideal for use by individuals with IGT and **diabetes** to prevent, reduce or eliminate the necessity of using insulin or other anti-diabetic medications. However, the supplement contains ingredients which. . .

DETD Nutritional supplements according to the present invention are not intended to supplant other forms of **diabetes** and IGT treatment, such as the appropriate diet and exercise, nor does necessarily it eliminate the need for insulin. Rather, . . .

DETD . . . has been discovered that a dietary supplement containing effective amounts of metabolically available forms of vanadium, chromium, magnesium, and natural **vitamin E** in combination with naturally available sources of aspirin, alpha lipoic acid, and folic acid will improve the metabolism of glucose and arrest or treat many of the cardiovascular complications or risk factors associated with **diabetes** or prediabetes. These components perform different functions which, when administered in appropriate dosages and forms, enhance the metabolism of glucose. . . itself, while at the same time prevent or reduce the likelihood of a cardiovascular event due to complications associated with **diabetes**. The importance of each of these key or "anchor" components is set forth below:

DETD . . . and building muscle mass, are scientifically unfounded, especially in its use for non diabetic individuals. Indeed, chromium supplementation, even in **diabetes**, is unsettled with the American **Diabetes** Association's Position Statement declaring, "The only known circumstance in which chromium replacement has any beneficial effect on glycemic control is. . .

DETD . . . for chromium supplementation in those individuals who are obviously chromium deficient, the actual prevalence of chromium deficiency in people with **diabetes** has never been, nor could it be, established. Nonetheless, chromium deficiency is common in diabetic patients, who have lower plasma. . .

DETD **Vanadyl Sulfate** (preferred dosage range 10.00-100.00 mg.; most preferred embodiment is 100.00 mg)

DETD . . . human tissue, has a well documented insulin enhancing effect in laboratory animals. After extensive studies using vanadate in diabetic rats, **vanadyl sulfate** 100 mg daily was found to significantly improve both hepatic and peripheral insulin sensitivity in patients with type II **diabetes**. **Vanadyl sulfate** was the preparation of vanadium chosen because it was not associated with any apparent toxicity during treatment periods of up. . .

DETD In a recently published study of moderately obese, insulin resistant type II diabetic patients, treatment with oral **vanadyl sulfate** 100 mg daily for three weeks resulted in a significant drop in fasting blood glucose levels and a highly significant. . . of

cholesterol and a decline, though not statistically significant, in serum triglycerides. Using the hyperinsulinemic-euglycemic clamp, it was shown that **vanadyl sulfate** dramatically enhanced insulin mediated glucose disposal with an 82% increase in glucose infusion rate. There was also significant reduction in hepatic glucose production, likely secondary to a potentiation of insulin's inhibitory effect on lipolysis by **vanadyl sulfate**. As in the previous studies, **vanadyl sulfate** was well tolerated.

DETD Magnesium, rather, magnesium deficiency, has long been known to be associated with **diabetes**, both type I and type II. Unlike some of the uncertainties regarding the incidence of chromium deficiency in **diabetes**, much more is known about the epidemiology and diagnosis of magnesium deficiency in **diabetes**, though discord regarding the actual prevalence of magnesium deficiency abounds. Indeed, magnesium deficiency may be the most underappreciated and underdiagnosed.

DETD . . . been linked to the Reaven-Modan syndrome and underlies the well-known association of magnesium deficiency to essential hypertension, insulin resistance, hyperinsulinemia, **diabetes**, congestive heart failure and ischemic heart disease. Also, magnesium deficiency has been associated with an increase in platelet reactivity, a condition known to exist in patients with **diabetes**, and may help explain the accelerated atherosclerosis and increased rate of acute thrombotic events that so tragically define **diabetes**. Finally, hypomagnesemia has been implicated in the retinopathic microvascular complication of **diabetes**, with lower levels of magnesium predicting a greater risk of severe diabetic retinopathy.

DETD While it is universally accepted that magnesium deficiency is common in both type I and type II **diabetes**, it is unclear as to the precise incidence of this condition in **diabetes**. The diabetic patient is certainly at risk for developing magnesium depletion via inadequate dietary intake and gastrointestinal and renal losses, . . . very specific, assessment of magnesium depletion in the body. Even with this exceedingly insensitive measure for magnesium deficiency, patients with **diabetes** have a 25% to 38% prevalence of hypomagnesemia. Using much more sensitive research-oriented tests (nuclear magnetic resonance spectroscopy and magnesium-selective. . .

DETD Still, the American **Diabetes** Association's position on screening, diagnosing and intervening for magnesium deficiency in patients with **diabetes** remains skeptical, as in the case of chromium deficiency. The inventor of the present invention believes this to be the. . .

DETD . . . Magnesium, as used in the present invention, is thus expected to improve glucose metabolism and to arrest or reduce any **diabetes** associated secondary risk factors.

DETD **Vitamin E** Natural (free 2R, 4'R, 8'R-alpha tocopherol) (preferred range 400.00-800.00 I.U.; most preferred dosage 400 I.U.)

DETD **Vitamin E** is the most widely studied of the antioxidant vitamins. The interest in **vitamin E** as an antioxidant is based on the many demonstrations in humans that giving **vitamin E** as a supplement decreases the oxidation of low density lipoprotein (LDL) *ex vivo*, an event critical in the atherogenic. . .

DETD **Vitamin E** supplementation has been shown to significantly reduce experimentally induced atherosclerosis in primates and more recent epidemiological and interventional human studies appear to support this observation. This assumes greater importance in those with **diabetes**, in view of the fact that as many as 60% of newly diagnosed diabetic patients already have clinically obvious cardiovascular. . .

DETD . . . disease was observed in a four year, prospective, observational

study in healthy middle-aged men who had higher intakes of dietary **vitamin E** as compared to those consuming small amounts.

DETD . . . at baseline were found to have a highly significant reduced risk of coronary artery disease if they had been on **vitamin E** supplements for at least two years during the eight year study. In a more recent and similar seven year prospective study of postmenopausal women without cardiovascular disease, dietary **vitamin E** consumption, but not **vitamin A** or **C**, was inversely associated with the risk of death from coronary artery disease.

DETD Perhaps the most powerful argument for **vitamin E** supplementation, at least, in those patients with already proven coronary artery disease, is the recently published Cambridge Heart Antioxidant. . . The CHAOS was a nearly three year prospective, secondary interventional trial of 2002 men and women, 10% of whom had **diabetes**, using natural **vitamin E** (free 2R, 4'R, 8'R-alpha tocopherol), 400 or 800 I.U. daily, in a randomized, placebo-controlled, double-blinded design. Either dose of **vitamin E** was associated with a dramatic and significant 77% risk reduction of non-fatal myocardial infarct. The benefit of treatment with **vitamin E** was apparent after 200 days, and the patients with **diabetes** also enjoyed the marked reduction in the risk of non-fatal heart disease.

DETD Another unrelated benefit of **vitamin E** supplementation is the favorable effect it has on insulin sensitivity, glucose metabolism and lipid levels in both healthy subjects and patients with type II **diabetes**. Conversely, in a prospective study of almost one thousand non diabetic, middle-aged men, low concentration of plasma **vitamin E** at baseline was found to be an independent and powerful predictor for the development of type II **diabetes** during the four year study. Remarkably, a low level of **vitamin E** was associated with a greater than five-fold risk of developing **diabetes** in the ensuing four years!

DETD **Vitamin E** was well tolerated in the studies where it was given as a supplement, and in the CHAOS study there. . . effects. Because of the unusually high incidence of clinical heart disease in newly diagnosed diabetic patients, and the favorable effect **vitamin E** has on the metabolic abnormalities of type II **diabetes**, the present invention will contain preferably 400-800 I.U.; and most preferably natural **vitamin E** (free 2R, 4'R, 8'R-alpha tocopherol) 400 I.U.

DETD . . . costs alone would be reduced by \$3 billion per year in this country if the 15 million adults, many with **diabetes**, who qualify for hypolipidemic medication per NCEP guidelines were to first be given aspirin prophylaxis.

DETD . . . enzyme necessary for the synthesis of thromboxane, a potent stimulator of platelet aggregation, a condition known to be increased in **diabetes** and to be causative in the atherosclerotic process. In patients with **diabetes**, aspirin has been shown to correct this abnormal increase in platelet activity.

DETD The cardiovascular protective effect of aspirin in men and women with **diabetes** was demonstrated in the Early Treatment Diabetic Retinopathy Study. Both type I and II patients were randomized to double-blinded placebo. . .

DETD . . . of alpha-lipoic acid to diabetic patients with neuropathy significantly reduces symptoms. Diabetic neuropathy has been an unusually refractive complication of **diabetes**.

DETD These anchor compounds are most preferably combined with other **vitamin** and mineral supplements. These additional ingredients are preferably included with the anchor compounds, and should be taken simultaneously.

DETD . . . that sufficient amounts of the most important minerals and vitamins are available, it is preferred that the supplement also include

vitamin A (or beta carotene), vitamin C, calcium, copper, selenium, and zinc.

DETD One example of the preferred embodiment, the "Pro Health Pak," is distributed by **Diabetes** Pro Health of Pittsburgh, Pa. Pro Health Pak consists of two major "components." The first, the so-called backbone of the supplement, . . .

DETD

3 tablets

Containing Chromium Polynicotinate and Picolinate, **Vanadyl Sulfate**, **Vitamin E** Natural, Standardized Willow Bark (aspirin), Folic Acid, Alpha-Lipoic Acid and a Multivitamin/Mineral Formula

1 tablet

Containing Magnesium Complex consisting of. . .

DETD

Chromium Polynicotinate and Picolinate
200-1500 mcg.

Vanadyl Sulfate Hydrate

10-100 mg.

Vitamin E Natural (free 2R, 4'R

400-800 I.U.

8'R-alpha tocopherol)

Standardized Willow Bark

160-320 mg.

(aspirin 20-40 mg.)

Magnesium Chloride, Citrate, Fumarate,
300-400 mg.

"common" Malate, Glutamate and Succinate Complex

Folic Acid (Folate) 400-600 mcg

Alpha-Lipoic Acid 0-600 mg

Vitamin A or Beta Carotene

5000 I.U. or

25,000 I.U.

Vitamin C 60 mg.

Thiamine 3.00 mg.

Riboflavin 3.60 mg.

Niacinamide 20.10 mg.

Vitamin B-6 23.10 mg

Vitamin B-12 48.00 mcg.

Biotin 300 mcg.

Pantothenic Acid 10.00 mg.

Calcium 150 mg.

Phosphorus 115 mg.

Iodine 150 mcg.

Zinc 15.00 mg.

Selenium 60 mcg.

Copper 2.00 mg.

Manganese. . .

DETD . . . containing a 30 day supply. The daily supplement is provided as an individual packet in which 4 tablets are enclosed. **Diabetes** Pro Health provides to the patient with **diabetes** or pre-**diabetes** a readily available and affordable and medically proven addition to their armamentarium for **diabetes** management, something which has been sorely lacking. Pro Health Pak will be recommended for use in patients with **diabetes** or pre-**diabetes** only as part of a complete **diabetes** treatment or prevention program, and will require regular blood glucose monitoring when used in the diabetic patient.

CLM What is claimed is:

2. The daily dietary supplement of claim 1, further comprising: (e) an

effective amount of a source of **vitamin E** natural.

10. A daily dietary supplement according to claim 9, wherein said source of vanadium is **vanadyl sulfate**.

14. A daily dietary supplement according to claim 2, wherein said effective amount of **vitamin E** natural is in the range of about 400 IU up to about 600 IU.

. . . effective amount of a source of vanadium; and (d) an effective amount of one or more of a source of **vitamin E** natural or a source of folic acid.

22. A daily dietary supplement according to claim 15, wherein said source of vanadium is **vanadyl sulfate**.

25. A daily dietary supplement according to claim 15, wherein said source of **vitamin E** natural is included and said effective amount of **vitamin E** natural is in the range of about 400 IU up to about 600 IU.

38. A method according to claim 28, wherein said source of vanadium is **vanadyl sulfate**.

41. A method according to claim 28, wherein said patient has **diabetes** or a pre-diabetic condition.

. . . one or more of an effective amount of a source of folic acid, an effective amount of a source of **vitamin E** or an effective amount of a source of lipoic acid.

. . . one or more of an effective amount of a source of folic acid, an effective amount of a source of **vitamin E** or an effective amount of a source of lipoic acid.

53. A method according to claim 44, wherein said source of vanadium is **vanadyl sulfate**.

57. A method according to claim 45, wherein said effective amount of **vitamin E** natural is in the range of about 400 IU up to about 600 IU.

58. A method according to claim 44, wherein said patient has **diabetes** or a pre-diabetic condition.

. . . 650 up to about 1500 .mu.g of chromium polynicotinate, in the range of about 10 up to about 100 mg **vanadyl sulfate** hydrate, in the range of about 400 up to about 800 I.U. **vitamin E** natural (free 2R, 4'R, 8'R-alpha tocopherol), in the range of about 300 up to about 400 mg magnesium chloride, . . .

AN 1999:120934 USPATFULL|
TI Dietary supplement and method of treatment for diabetic control|
IN Fine, Stuart A., Northbrook, IL, United States
PA Akesis Pharmaceuticals, Inc., La Jolla, CA, United States (U.S. corporation)
PI US 5962030 19991005
AI US 1997-964814 19971105 (8)
PRAI US 1997-39958P 19970307 (60)
DT Utility|
FS Granted|
EXNAM Primary Examiner: Jarvis, William R. A.|
LREP Gray Cary Ware & Freidenrich, Reiter, Stephen E.|

CLMN Number of Claims: 60|

ECL Exemplary Claim: 1|

DRWN No Drawings

LN.CNT 1156|

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DT Utility
FS APPLICATION
LN.CNT 19583
INCL INCLM: 435/069.100
INCLS: 435/325.000; 435/320.100; 536/023.200
NCL NCLM: 435/069.100
NCLS: 435/325.000; 435/320.100; 536/023.200

IC [7]
ICM: C12P021-02
ICS: C12N005-06; C12N015-74; C07H021-04

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 106 OF 113 USPATFULL
AN 2002:66896 USPATFULL
TI ABC transport polynucleotides, polypeptides, and antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
PI US 2002037549 A1 20020328
AI US 2001-767870 A1 20010124 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US19736, filed on 20 Jul 2000,
UNKNOWN
PRAI US 1999-145215P 19990723 (60)
US 1999-149445P 19990818 (60)
US 1999-164730P 19991112 (60)

DT Utility
FS APPLICATION
LN.CNT 12219
INCL INCLM: 435/069.100
INCLS: 435/006.000; 435/007.100; 435/183.000; 435/325.000; 536/023.100
NCL NCLM: 435/069.100
NCLS: 435/006.000; 435/007.100; 435/183.000; 435/325.000; 536/023.100
IC [7]
ICM: C12Q001-68
ICS: G01N033-53; C07H021-04; C12N009-00; C12P021-02; C12N005-06

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 107 OF 113 USPATFULL
AN 2002:66870 USPATFULL
TI IL-6-like polynucleotides, polypeptides, and antibodies
IN Ruben, Steven M., Olney, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
PI US 2002037523 A1 20020328
AI US 2001-875016 A1 20010607 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US33134, filed on 7 Dec 2000,
UNKNOWN
PRAI US 1999-169838P 19991209 (60)
DT Utility
FS APPLICATION
LN.CNT 11587
INCL INCLM: 435/006.000
INCLS: 536/023.500; 435/007.100; 435/069.520; 435/320.100; 435/325.000;
530/351.000; 424/085.200
NCL NCLM: 435/006.000
NCLS: 536/023.500; 435/007.100; 435/069.520; 435/320.100; 435/325.000;
530/351.000; 424/085.200
IC [7]
ICM: C12Q001-68
ICS: G01N033-53; C07H021-04; C12P021-04; A61K038-20; C12N005-06;
C07K014-54

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 108 OF 113 USPATFULL
AN 2002:22131 USPATFULL
TI 18 Human secreted proteins
IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002012966 A1 20020131
AI US 2001-768826 A1 20010125 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US22350, filed on 15 Aug 2000,
UNKNOWN
PRAI US 1999-148759P 19990816 (60)
DT Utility
FS APPLICATION
LN.CNT 18157
INCL INCLM: 435/069.100
INCLS: 435/325.000; 435/183.000; 530/350.000; 536/023.100
NCL NCLM: 435/069.100
NCLS: 435/325.000; 435/183.000; 530/350.000; 536/023.100
IC [7]
ICM: C12P021-02
ICS: C07H021-04; C12N009-00; C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 109 OF 113 USPATFULL
AN 2002:12261 USPATFULL
TI Uteroglobin-like polynucleotides, polypeptides, and antibodies
IN Ni, Jian, Germantown, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002006640 A1 20020117
AI US 2001-846258 A1 20010502 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US30326, filed on 3 Nov 2000,
UNKNOWN
PRAI US 1999-163395P 19991104 (60)
DT Utility
FS APPLICATION
LN.CNT 12076
INCL INCLM: 435/069.100
INCLS: 435/325.000; 435/006.000; 435/007.100; 514/044.000; 530/350.000;
536/023.500
NCL NCLM: 435/069.100
NCLS: 435/325.000; 435/006.000; 435/007.100; 514/044.000; 530/350.000;
536/023.500
IC [7]
ICM: C12P021-02
ICS: C12N005-06; A61K048-00; C07K014-72; C12Q001-68; G01N033-53;
C07H021-04

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 110 OF 113 USPATFULL
AN 2002:8489 USPATFULL
TI Retinoid receptor interacting polynucleotides, polypeptides, and
antibodies
IN Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
PI US 2002004489 A1 20020110
AI US 2001-788600 A1 20010221 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US22351, filed on 15 Aug 2000,
UNKNOWN
PRAI US 1999-148757P 19990816 (60)
US 2000-189026P 20000314 (60)

DT Utility
FS APPLICATION
LN.CNT 11257
INCL INCLM: 514/044.000
INCLS: 536/023.500; 530/350.000; 435/069.100; 435/325.000; 530/388.220
NCL NCLM: 514/044.000
NCLS: 536/023.500; 530/350.000; 435/069.100; 435/325.000; 530/388.220
IC [7]
ICM: A61K048-00
ICS: C07H021-04; C12P021-02; C12N005-06; C07K014-705; C07K016-28
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 111 OF 113 USPATFULL
AN 2001:152504 USPATFULL
TI Pharmaceutical compositions of vanadium biguanide complexes and their use
IN Orvig, Chris, Vancouver, Canada
McNeill, John H., Vancouver, Canada
PA The University of British Columbia, Vancouver, Canada (non-U.S. corporation)
PI US 6287586 B1 20010911
AI US 1999-396982 19990915 (9)
PRAI US 1998-101074P 19980918 (60)
DT Utility
FS GRANTED
LN.CNT 798
INCL INCLM: 424/423.000
INCLS: 514/184.000; 514/866.000
NCL NCLM: 424/423.000
NCLS: 514/184.000; 514/866.000
IC [7]
ICM: A61K009-10
ICS: A61K031-28
EXF 514/184; 514/866; 424/464; 424/451; 424/489; 424/499; 424/423; 424/436; 424/45
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 112 OF 113 USPATFULL
AN 1999:37095 USPATFULL
TI Composition and method for treating **diabetes**
IN Gutierrez, Enrique G., 5212 Wade Dr., Metairie, LA, United States 70003
Leboeuf, Reynold, Houma, LA, United States
PA Gutierrez, Enrique G., Metairie, LA, United States (U.S. individual)
PI US 5885980 19990323
AI US 1996-669939 19960625 (8)
DT Utility
FS Granted
LN.CNT 461
INCL INCLM: 514/186.000
INCLS: 514/593.000
NCL NCLM: 514/186.000
NCLS: 514/593.000
IC [6]
ICM: A61K031-555
ICS: A61K031-175
EXF 514/186; 514/593
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 113 OF 113 USPATFULL
AN 1998:153865 USPATFULL
TI Composition and method for reducing blood sugar levels in diabetic humans

IN Al-Dahir, Holly Christine, 4521 Conlin St., Metairie, LA, United States
70006
PI US 5846544 19981208
AI US 1997-891590 19970711 (8)
DT Utility
FS Granted
LN.CNT 245
INCL INCLM: 424/195.100
INCLS: 514/783.000; 514/866.000; 514/884.000
NCL NCLM: 424/732.000
NCLS: 514/783.000; 514/866.000; 514/884.000
IC [6]
ICM: A61K035-78
EXF 424/195.1; 514/783; 514/866; 514/884

=> d 11 112-113 kwic, bib

L1 ANSWER 112 OF 113 USPATFULL
TI Composition and method for treating **diabetes**
AB A method of treating **diabetes** in a patient in need thereof,
comprising administering to said patient a therapeutically effective
amount of a pharmaceutically acceptable VO.sup.+2. . . .
SUMM The present invention is directed to compositions and methods of using
the same for the treatment of **diabetes**. The composition
includes a combination of the oral hypoglycemic agent micronized
glyburide and a trace rare metal supplement, such as. . . .
SUMM **Vanadyl sulfate** (VOSO.sub.4), which is readily
available over the counter in the United States at local health food
stores, is marketed as a nutritional supplement. Although it is used for
other purposes as well, **vanadyl sulfate** has been
taken to improve glycemic control. **Vanadyl sulfate**
generates the vanadyl radical (VO.sup.-3) which has been shown to
reverse **diabetes** in pancreatectomized rats. The radical
(VO.sub.3.sup.-) is the predominate radical form in extracellular fluid.
It is reduced intracellularly into the. . . .
SUMM been numerous publications in the medical scientific literature
demonstrating that vanadyl radical generating compounds have exceptional
antidiabetic effects in animals. **Vanadyl sulfate**
orally administered to animals has been shown to produce normoglicemia
which can persist even after discontinuation of the therapy.
SUMM in humans have been unsuccessful. Recent published human trials
show only a mild improvement in glycemic control with administration of
vanadyl sulfate.
SUMM A third factor involves toxicity. Compounds which tend to have greater
cellular penetration typically exhibit greater toxicity levels. In
particular, **vanadyl sulfate** (VOSO.sub.4) is 1/10 as
toxic than other vanadyl radical generating compounds. However, this
compound has a lower antidiabetic potency than. . . .
SUMM Oral hypoglycemic agents such as tolazamide, tolbutamide,
chlorpropamide, micronized and non-micronized glyburide,
glimepiride, glypizide, metformin, and phenformin have been available as
oral treatments for **diabetes**, typically non-insulin dependent
(Type II) **diabetes**. Oral hypoglycemic agents in general are
disadvantageous because the extent, predictability and duration of the
antidiabetic effect is unpredictable. . . .
SUMM It would therefore be a significant advance in the art of treating
diabetes to provide a composition which can effectively treat
both Type I and Type II **diabetes** and which can provide
effective glycemic control for all, including patients who cannot
effectively utilize or are resistant to insulin. . . .
SUMM The present invention is directed to a composition and method for the

treatment of Type I and Type II **diabetes** and complications arising therefrom comprising a therapeutically effective amount of each of:

- SUMM The present invention is also directed to a method of treating **diabetes** comprising administering to a warm blooded animal, including humans, a therapeutically effective amount of the composition of the present invention.
- DRWD . . . graph showing glucose levels for the treatment of a Type II adult onset diabetic patient using Glynase (micronized glyburide) alone, **vanadyl sulfate** alone and the composition of the present invention;
- DETD The present invention is directed to a composition and method of treating warm blooded animals, including humans suffering from **diabetes** with a pharmaceutical composition comprising a VO.sup.+2 generating compound together with micronized glyburide as the active agents. The active agents. . .
- DETD . . . administered to a warm blooded animal). Examples of vanadyl compounds include sodium orthovanadate, sodium metavanadate, bis oxovanadium, sodium metavanadate (NaVO.sub.3), **vanadyl sulfate** (VOSO.sub.4), sodium orthovanadate (Na.sub.3 VO.sub.4), ammonium metavanadate (NH.sub.4 VO.sub.3.sup.-), aluminum orthophosphate vanadia (V.sub.2 O.sub.5 -AlPO.sub.4), diperoxovanadate, bis(maltolato)oxovanadium(IV) (BMOV), VOCl.sub.3, VOCl.sub.2, VCl.sub.3, . . .
- DETD . . . of VO.sup.+2 generating compounds on the basis of the weight of the element vanadium. The preferred VO.sup.+2 generating compound is **vanadyl sulfate** in part because it is considered least toxic.
- DETD . . . the compound necessary to obtain the desired amount of the VO.sup.+2 radical can be readily calculated. By way of example, **vanadyl sulfate** (VOSO.sub.4) can generally be administered in an amount of from about 10 to 120 mg/day, preferably from about 30 to 90 mg/day, most preferably from about 60 to 90 mg/day. **Vanadyl sulfate** is commercially available as a nutritional supplement from several sources including GNC health food stores. The required dosage amount may. . .
- DETD For example, a typical daily dosage of **vanadyl sulfate** and micronized glyburide based on the extent of loss of glycemic control or for insulin resistance for a typical patient. . .
- DETD . . . from about 4 to 12 weeks. During the period of administration the total amount of the VO.sup.+2 generating compound (e.g. **vanadyl sulfate**) administered is generally from about 1000 to 3000 mg. Shorter or longer durations of treatment can be employed depending on. . .
- DETD In a preferred form of the invention for the treatment of **diabetes** a dosage of 60-90 mg of **vanadyl sulfate** and 6-12mg of micronized glyburide are administered once daily, preferably in the morning for at least 8 weeks and up. . . at the normal or near normal ranges. Thereafter, the dosage regimen is reduced to 6 mg of glyburide/60 mg of **vanadyl sulfate** administration. Glycemic control is achieved independently of insulin production.
- DETD The active components (e.g. **vanadyl sulfate** and micronized glyburide) are commercially available and can be utilized as such in the present invention. However, if fixed combination. . . appropriate dosage form according to known techniques in the art. Ideally a tablet containing 3 mg glyburide and 30 mg **vanadyl sulfate** would be most practical for this purpose.
- DETD A 57 year old smoker was diagnosed with **diabetes** in 1992. He had concurrent severe coronary artery disease which required angioplasty several years prior to 1992. As shown in. . . a low of 130 mg/dl to a high of above 350 mg/dl. Glynase administration was stopped followed by

administration of **vanadyl sulfate** at a daily dosage of 60 mg. As shown in FIG. 1, glucose levels were slightly improved but nonetheless glucose. . .

- DETD Thereafter, the subject received 60 mg of **vanadyl sulfate** and 6 mg of Glynase per day for a period of approximately one month. There was an immediate and significant. . .
- DETD Thereafter for a period of approximately one week, the amount of **vanadyl sulfate** was increased to 70 mg per day and there was a further drop of glucose level to approximately 110 mg/dl.. . . of from about 90 to 110 mg/dl. Glynase therapy was discontinued and the subject was placed on 15 mg of **vanadyl sulfate** per day with glucose levels remaining below about 110 mg/dl. Thereafter all medication was discontinued and the patient maintained normal. . .
- DETD As shown with the subject discussed in Example 1, the combination of **vanadyl sulfate** and Glynase resulted in a significant lowering of glucose levels and maintenance of glucose levels within a narrow, normal range.. . .
- DETD A 59 year old black female had a seven year history of **diabetes mellitus**. When the subject was first tested as shown in FIG. 2, she was taking glucotrol (20 mg) which is. . .
- DETD Thereafter, the patient was administered 25 units of insulin per day plus 60 mg of **vanadyl sulfate** and 6 mg of Glynase over the course of approximately 6 months. Glucose levels dropped from a high of about. . .
- DETD Thereafter, insulin therapy was discontinued but the subject continued to receive 60 mg of **vanadyl sulfate** with 9 mg of generic Glynase per day. As a result, the subject's glucose levels remained at the lowest levels. . .
- DETD A 14 year old white female was diagnosed with Type I juvenile insulin dependent **diabetes mellitus** at the age of 11. From the age of 11 to 13 she exhibited poorly controlled glucose levels with. . .
- DETD . . . of insulin in the evening as per established therapy. Thereafter, insulin administration was continued and the combination of 60 mg **vanadyl sulfate** and 6 mg of Glynase was added to the insulin therapy administered daily over the course of approximately 6 weeks.. . .
- DETD Thereafter, **vanadyl sulfate**/Glynase therapy was continued and insulin therapy was reduced, first to 12 units per day, then to 10 units per day. . .
- DETD A 77 year old white male was diagnosed with insulin dependent **diabetes mellitus**. He was considered to be a brittle diabetic. He had extreme difficulty with frequent hypoglycemic events where blood sugar. . .
- DETD . . . 500 mg of glucophage, a known oral anti-diabetic drug as well as 6 mg of Glynase and 60 mg of **vanadyl sulfate** along with insulin with 30 units in the morning and 15 units in the evening in an effort to stabilize. . .
- DETD A 42 year old black female developed type I juvenile insulin dependent **diabetes** at age 8. Over the years she developed progressively greater insulin resistance (acanthosis nigricans).
- DETD Thereafter the subject received both **vanadyl sulfate** (80 mg) and Glynase (12 mg) which reduced the daily insulin requirement to only 200 units from 1,200 and furthermore. . .
- CLM What is claimed is:
1. A pharmaceutical composition for use in the treatment of **diabetes**, said composition comprising a therapeutically effective amount of: (a) VO.sub.2 generating compound selected from the group consisting of sodium orthovanadate, sodium metavanadate, bis oxovanadium, sodium metavanadate (NaVO.sub.3), **vanadyl sulfate** (VOSO.sub.4), sodium orthovanadate (Na.sub.3 VO.sub.4), ammonium metavanadate (NH.sub.4 VO.sub.3), aluminum orthophosphate vanadia (V.sub.2 O.sub.5 AIPO.sub.4), diperoxovanadate, bis (maltolato)

being 6'4" in height, having a history of **diabetes** from the distaff side, diagnosed with Type II (insulin resistance) for four years, was being maintained on an insulin dosage. . . .

DETD A fifty-five year old Caucasian male weighing 335 pounds and standing 5'6" tall had Type II non-insulin dependent **diabetes** mellitus for four years, being maintained on a sulfonylurea hypoglycemic agent, specifically **chlorpropamide**, as well as being maintained on a blood pressure medication and a weight controlled medication, and not on a diabetic. . . .

DETD It is noted that, beginning one month before initial dosage of the herbs, subject took **vanadyl sulfate** (5,000 mcg) chromium picolinate (250 mcg), and a multi-vitamin capsule once daily with a meal, with no effect on blood sugar level. **Vanadyl sulfate** and chromium picolinate are known hypoglycemic agents. When subject's blood sugar level was reduced to approximately 200 mg/dl, subject began. . . .

DETD A male Caucasian, 17 years of age, 5'2" in height, 116 pounds having Type I **diabetes** mellitus diagnosed in November, 1995, one year before herbal treatment commenced, was very active and strenuously exercised daily, was on. . . .

DETD Subject is on vitamin and mineral supplements, including **vanadyl sulfate** and chromium picolinate and gymnema sylvestre, which are known hypoglycemic agents.

DETD Based upon the test results, the treatment for adult onset (Type II **diabetes**) requires ingestion of bilberry fruit (approximately 375 milligrams of the milled herb) and valerian root approximately 400 to (450 to. . . .

DETD reducers such as penicillin and its derivatives such as, amoxycillin, as well as mineral hypoglycemic agents as chromium picolinate and **vanadyl sulfate**, (iv) insulin dependent **diabetes** mellitus subjects will experience hyperglycemia especially in the early stages of treatment if the bilberry and valerian are discontinued or. . . .

AN 1998:153865 USPATFULL

TI Composition and method for reducing blood sugar levels in diabetic humans

IN Al-Dahir, Holly Christine, 4521 Conlin St., Metairie, LA, United States 70006

PI US 5846544 19981208

AI US 1997-891590 19970711 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Prats, Francisco C.

LREP Carbo, Michael D.

CLMN Number of Claims: 4

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 245